Since 1881

# THE AMERICAN COLLEGE

**(An Autonomous Institution Affiliated to Madurai Kamaraj University)**
**Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA – 3 .46 on a 4 - point scale**

MADURAI - 625002

## SSR Cycle – 3

### Criterion I – Curricular Aspects

### 1.3 Curriculum Enrichment

## 1.3.4 Report of Student Projects

# The American College,Madurai

(An Autonomous Institution Affiliated to Madurai Kamaraj University, India)

(Re-accredited(2nd Cycle) by NAAC with Grade A CGPA - 3.46 on a 4 - point scale)

SINCE 1881

**Continuous Assesment & End Of Semester Marks**

**Course Code** : CHE 3534
**Course Title** : Project
**Mark Entered By** : KARTHIK KUMAR
**Name of Course Teacher(s)** : KARTHIK KUMAR

**Semester** : Even
**Month & Year** : April 2020
**Date of Submission** : 06-06-2020

| Roll No. | Name | Continuous Assessment | | |
|---|---|---|---|---|
| | | L-1 | L-2 | Total |
| | Max.Mark | 75 | 25 | 100 |
| 17CHE01 | M.ABDUL RAHUMAN | 70 | 23 | 93 |
| 17CHE02 | S.AJAY | A | NA | 0 |
| 17CHE03 | V.AJITH | 71 | 24 | 95 |
| 17CHE04 | A.AKILAN | 63 | 21 | 84 |
| 17CHE08 | ARUNKUMAR P | 69 | 23 | 92 |
| 17CHE10 | S.ARUN SATHIS KUMAR | 68 | 23 | 91 |
| 17CHE11 | T.BALAJI | 70 | 23 | 93 |
| 17CHE12 | K.V.BALAJI | 72 | 24 | 96 |
| 17CHE13 | S.BILALUDHEEN | A | NA | 0 |
| 17CHE14 | K.M.DHILEEP KUMAR | 65 | 22 | 87 |
| 17CHE16 | M.GOKUL | 68 | 23 | 91 |
| 17CHE20 | V.HILARI EBINESAR | 69 | 23 | 92 |
| 17CHE21 | R.ILAYA RAJA | 50 | NA | 50 |
| 17CHE24 | T.JERRIN JOHN | A | NA | 0 |
| 17CHE25 | J.JEYA PRAKASH | 69 | 23 | 92 |
| 17CHE27 | S.JOHNY MARSHALL | 70 | 23 | 93 |
| 17CHE28 | K.JOTHEESHWARAN | 72 | 24 | 96 |
| 17CHE29 | M.KISHORE KUMAR | 70 | 23 | 93 |
| 17CHE30 | T.LOGANATHAN | 66 | 22 | 88 |
| 17CHE31 | T.MANIMARAN | A | A | 0 |

**Signature of the Course Teacher(s)**

**Date :** ----------

**Signature of Internal(s)**---------- CT. CHRISTOPHER JEYAKUMAR

**Name & Signature of External**----------

---

**Signature of Head of the Department**

**Date :** ----------

**Signature of Head of the Department**----------

Dr.K.JOHN PRAKASAM M.Sc.,Ph.D.
Associate Professor & Head
Department of Chemistry (U.G)
The American College
Madurai-625 002

# The American College,Madurai

(An Autonomous Institution Affiliated to Madurai Kamaraj University, India)

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SINCE 1881

## Continuous Assesment & End Of Semester Marks

| | | | |
|---|---|---|---|
| **Course Code** | : CHE 3534 | **Semester** | : Even |
| **Course Title** | : Project | **Month & Year** | : April 2020 |
| **Mark Entered By** | : KARTHIK KUMAR | **Date of Submission** | : 06-06-2020 |
| **Name of Course Teacher(s)** | : KARTHIK KUMAR | | |

| Roll No. | Name | Continuous Assessment | | |
|---|---|---|---|---|
| | | L-1 | L-2 | Total |
| | Max.Mark | 75 | 25 | 100 |
| 17CHE32 | S.MARIATONY JEYANTH | 70 | 23 | 93 |
| 17CHE33 | T.MARIYAPPAN | 70 | 23 | 93 |
| 17CHE35 | K.MUGILAN | 73 | 24 | 97 |
| 17CHE39 | B.NITHISH KUMAR | 70 | 23 | 93 |
| 17CHE40 | LK.PRASHANTH | 71 | 23 | 94 |
| 17CHE41 | N.PRAVEEN KUMAR | 70 | 23 | 93 |
| 17CHE42 | M.RAJA GURU REVAN | 69 | 23 | 92 |
| 17CHE44 | L.RAJESHWARAN | 69 | 23 | 92 |
| 17CHE45 | M.RAM KUMAR | A | NA | 0 |
| 17CHE46 | D.ROOBAN RAJ | 69 | 23 | 92 |
| 17CHE49 | A.SARATH CHARLES RAJ | 68 | 23 | 91 |
| 17CHE50 | L.SARVESHWER | 72 | 24 | 96 |
| 17CHE51 | B.SATHISHKANNAN | 72 | 24 | 96 |
| 17CHE52 | V.SEENIVASAN | 65 | 22 | 87 |
| 17CHE53 | K.SURYA | 66 | 22 | 88 |
| 17CHE56 | M.VEERAVIGNESH | 73 | 24 | 97 |
| 17CHE57 | P.VELLAI PANDI | 64 | 21 | 85 |
| 17CHE58 | M.VENKATESH | 69 | 23 | 92 |
| 17CHE59 | K.VIGNESH | 73 | 24 | 97 |
| 17CHE60 | M.VIGNESH | 70 | 23 | 93 |

**Signature of the Course Teacher(s)**

**Signature of Internal(s)**---------- C.T. CHRISTOPHER JEYAKUMAR

**Date :** ----------

**Name & Signature of External**----------

---

**Signature of Head of the Department**

**Signature of Head of the Department**----------

Dr.M.JOHN ADAIKALASAMY, M.Sc.,Ph.D.
Associate Professor & Head
Department of Chemistry (U.G)
The American College
Madurai-625 002

**Date :** ----------

# The American College,Madurai

(An Autonomous Institution Affiliated to Madurai Kamaraj University, India)

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SINCE 1881

## Continuous Assesment & End Of Semester Marks

**Course Code** : CHE 3534
**Course Title** : Project
**Mark Entered By** : KARTHIK KUMAR
**Name of Course Teacher(s)** : KARTHIK KUMAR

**Semester** : Even
**Month & Year** : April 2020
**Date of Submission** : 06-06-2020

| Roll No. | Name | Continuous Assessment | | |
|---|---|---|---|---|
| | | L-1 | L-2 | Total |
| | Max.Mark | 75 | 25 | 100 |
| 17CHE61 | J.VINCENT JOA | 72 | 24 | 96 |
| 17CHE62 | A.WESLIN BRADESH KUMAR | A | NA | 0 |
| 17CHE63 | J.XAVIER RAJ | 71 | 23 | 94 |
| 17CHE64 | S.DARWIN | 70 | 23 | 93 |
| 17CHE65 | R.SARAVANA PANDIAN | 72 | 24 | 96 |
| 17CHE66 | R.HARISH BABU | 71 | 23 | 94 |
| | | | | |
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| | | | | |
| | | | | |
| | | | | |

**Signature of the Course Teacher(s)**

**Signature of Internal(s)**---------T. CHRISTOPHER JEYAKUMAR

**Date :** ----------

**Name & Signature of External**----------

---

**Signature of Head of the Department**

**Signature of Head of the Department**----------

Dr.K.JOHN ADAIKALASAMY, M.Sc., Ph.D.,
Associate Professor & Head
Department of Chemistry (U.G)
The American College
Madurai-625002

**Date :** ----------

# ONLINE GADGET VEHICLE PROPERTY SALE AND RENTING SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**S . KASIRAJAN**

**17BCA30**

*Under the Guidance of*

Dr. A. JOHN SANJEEV KUMAR MCA .,MBA.,M.Phil .,Phd (Computer Applications)

**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

( Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-points scale )

Madurai – 625002.

# ICE CREAM SHOP MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

**(2017-2020)**


*Submitted by*

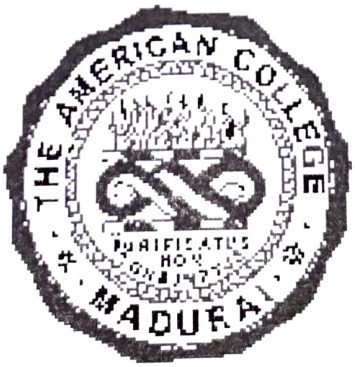
**M.PRADEEP**

**17BCA51**

*Under the Guidance of*

**Dr. A. JOHN SANJEEV KUMAR, MCA, MBA, M.Phil., PhD**

**(Computer Applications)**



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Madurai – 625002.

# LS & NME COURSE SELECTION

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

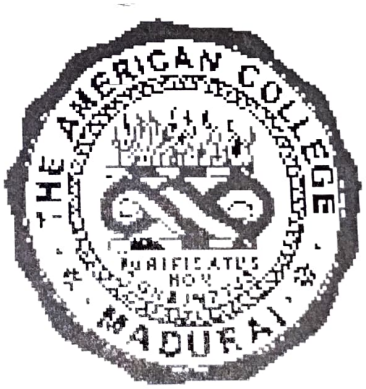
*Submitted by*

**K.UTHAYA KUMAR**

**17BCA152**

*Under the Guidance of*

**Mrs. G. PAULINE PERSHYL., M.Sc., B.Ed.,**




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An Autonomous Institution affiliated to Madurai Kamaraj University

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Madurai – 625002.

# STUDENT AND FEES MANAGEMENT SYSTEM FOR VANAVIL FINE ARTS

A Project Report Submitted to the Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*


**S.SOWMIYA**

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(Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-points scale)

Madurai – 625002.

# SYSTEM TO FILTER UNWANTED MESSAGES USING OSN USERWALLS

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**B. KAVITHA**

**17BCA161**

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**THE AMERICAN COLLEGE**

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Madurai – 625002.

# Online Pet Shop

A Project Report Submitted To The Madurai Kamaraj University
In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATION**

(2017-2020)

*Submitted by*

**M.MUNISH**

**17BCA121**

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**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

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Madurai – 625002.

# CRIME REPORTING SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**S. GOWTHAMAN**

**17BCA26**

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An Autonomous Institution affiliated to Madurai Kamaraj University

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Madurai – 625002.

# REAL ESTATE MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**T. GANESH KUMAR**

**17BCA102**

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**Miss.P. LUNA JEBASRI, M.SC.(IT)**




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Madurai – 625002.

# ONLINE PARKING LOT MANAGEMENT

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**D. AAKASH KARTHIKEYAN**

**17BCA84**

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( Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-points scale )

Madurai – 625002.

# FUND MANAGER

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**S.PRANAV RAJAN**

**17BCA52**

*Under the Guidance of*

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**THE AMERICAN COLLEGE**

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Madurai – 625002.

# Efficient and Secure Data Handling in Government Sectors

A Project Report Submitted To TheMaduraiKamarajUniversity

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

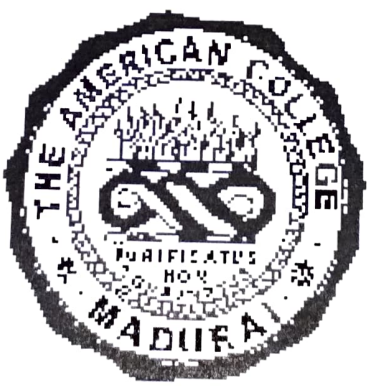
*Submitted by*

**G.SUBASHINI**

**17BCA69**

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Madurai – 625002.

# ONLINE COURSE MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**A.POOJA**

**17BCA128**

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Madurai – 625002.

# ONLINE WORKERS MANANGEMENTSERVICES

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*


**R.SARAVANA KUMAR**

**17BCA144**


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**Mrs. G. PAULINE PERSHYL., M.Sc., B.Ed.,**





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Madurai – 625002.

# CYCLE STORE MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfilment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*


**M NAVEEN RAJ**

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Madurai – 625002.

# SRI SASTHA PARUTHIPAAL

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATION**

(2017-2020)

*Submitted by*

**R.MANIKANDARAJA**

**17BCA119**

*Under the Guidance of*

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**THE AMERICAN COLLEGE**

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Madurai – 625002.

# COMPUTER ACCESSORIES

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*


**N.GOWTHAM KUMAR**

**17BCA108**


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**Dr. N. RAVIA SHABNAM PARVEEN, MCA, M.Phil, M.E (CSE), Ph.D.,**


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Madurai – 625002.

# ENCRYPTION SECURE COMMUNICATION USING TEXT EDITOR AND PUBLIC KEY INFRASTRUCTURE

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**M. DHARANI SELVI**

**17BCA97**

*Under the Guidance of*

**Ms. P. LUNA JEBASRI M.Sc., IT.,**




**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

( Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-points scale )

Madurai – 625002.

# ONLINE TRAIN SEASON TICKET

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**A.GOMATHI**

**17BCA23**

*Under the Guidance of*

**Dr.A. John Sanjeev Kumar, MCA, MBA, M.Phil, PhD**




**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

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Madurai – 625002.

# AUTOMATED LIFE INSURANCE POLICY SYSTEM

A Project Report Submitted To the Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**S.MANIKANDAN**

**17bca118**

*Under the Guidance of*

**Dr. A. John Sanjeev Kumar, MCA, MBA, M.Phil., Ph.D.**




**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

(Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-points scale)

Madurai – 625002.

# EMPLOYEE INFORMATION SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**G. Udhayakumar**

**17BCA74**

*Under the Guidance of*

**Mr.B.ILAYARAJA,MCA.,PGDCA.,M.phil.,B.Ed.,**




**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

( Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-points scale )

Madurai – 625002.

# COMPUTER ACCESSORIES

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**S. VAISHNU DEV**

**17BCA153**

*Under the Guidance of*

**Dr. N. RAVIA SHABNAM PARVEEN, MCA, M.Phil, M.E (CSE), Ph.D.,**




**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

( Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-points scale )

Madurai – 625002.

# PRIVATE PARKING SYSTEM

A Project Report Submitted To the Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**S.RAGHUL**

**17BCA133**

*Under the Guidance of*

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**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

(Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-points scale)

Madurai – 625002.

# RECURRING DEPOSIT

A project report submitted to the Madurai Kamaraj University

in partial fulfillment for the award of the degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submittedby*

**N.K. SRIRAM BABU**

**17BCA150**

*Under the Guidance of*

**Mr. M. MARTIN PORUS., M.Sc., PGDCA.,**

**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

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Madurai – 625002.

# ONLINE JEWELLRY SHOPPING

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**C.ALAMELU**

**17BCA86**

*Under the Guidance of*

**Dr.N.RAVIA SHABNAM PARVEEN.,MCA.,M.Phil.,M.E(CSE).,Ph.D.,**




**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

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Madurai – 625002.

# CYBER CAFE MANAGEMENTSYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

*Submitted by*

**A.RAGHUL GANDHI**

**17BCA134**

*Under the Guidance of*

**Mr.B.Ilayaraja MCA.,PGDCA.,M.Phil.,B.Ed.,**




**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

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Madurai – 625002.

# ONLINE GADGET VEHICLE PROPERTY SALE AND RENTING SYSTEM

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(2017-2020)

*Submitted by*

**S . KASIRAJAN**

**17BCA30**

*Under the Guidance of*

Dr. A. JOHN SANJEEV KUMAR MCA .,MBA.,M.Phil .,Phd (Computer Applications)

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Madurai – 625002.

# ICE CREAM SHOP MANAGEMENT SYSTEM

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**BACHELOR OF COMPUTER APPLICATIONS**

**(2017-2020)**


*Submitted by*

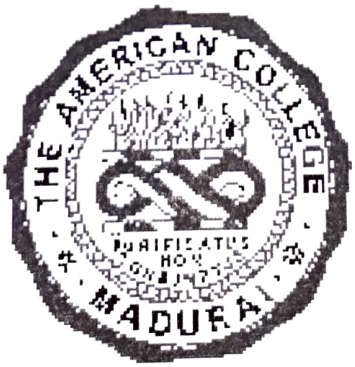
**M.PRADEEP**

**17BCA51**

*Under the Guidance of*

**Dr. A. JOHN SANJEEV KUMAR, MCA, MBA, M.Phil., PhD**

**(Computer Applications)**



**THE AMERICAN COLLEGE**

An Autonomous Institution affiliated to Madurai Kamaraj University

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Madurai – 625002.

# LS & NME COURSE SELECTION

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

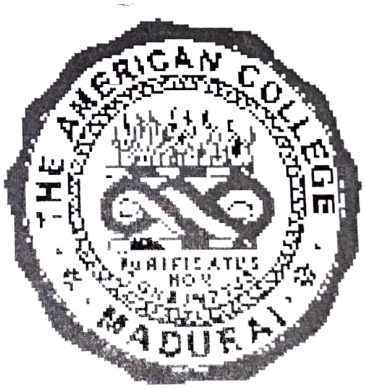
*Submitted by*

**K.UTHAYA KUMAR**

**17BCA152**

*Under the Guidance of*

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Madurai – 625002.

# STUDENT AND FEES MANAGEMENT SYSTEM FOR VANAVIL FINE ARTS

A Project Report Submitted to the Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

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# SYSTEM TO FILTER UNWANTED MESSAGES USING OSN USERWALLS

A Project Report Submitted To The Madurai Kamaraj University

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**BACHELOR OF COMPUTER APPLICATIONS**

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# Online Pet Shop

A Project Report Submitted To The Madurai Kamaraj University
In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATION**

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# CRIME REPORTING SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# REAL ESTATE MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# ONLINE PARKING LOT MANAGEMENT

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# FUND MANAGER

A Project Report Submitted To The Madurai Kamaraj University

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**BACHELOR OF COMPUTER APPLICATIONS**

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# Efficient and Secure Data Handling in Government Sectors

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In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

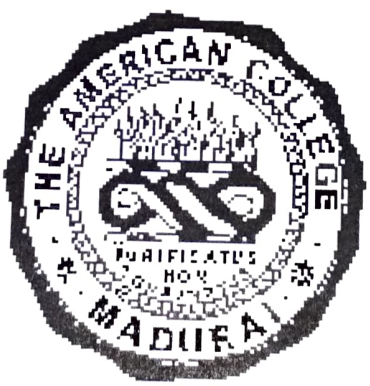
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# ONLINE COURSE MANAGEMENT SYSTEM

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In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# ONLINE WORKERS MANANGEMENTSERVICES

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# CYCLE STORE MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

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**BACHELOR OF COMPUTER APPLICATIONS**

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# SRI SASTHA PARUTHIPAAL

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATION**

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# COMPUTER ACCESSORIES

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

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# ENCRYPTION SECURE COMMUNICATION USING TEXT EDITOR AND PUBLIC KEY INFRASTRUCTURE

A Project Report Submitted To The Madurai Kamaraj University

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# ORGANIC FARMING ASSISTANT WEB SERVICE

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# FROZEN FOOD ORDERING SERVICE

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# ONLINE GOLD LOAN MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

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# MEDICAL REPORT MANAGEMENT

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# TEXTILES ANDREADYMADES SHOP MANAGEMENT

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

## BACHELOR OF COMPUTER APPLICATIONS

(2017-2020)

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# ALUMINI MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# BOOK WIZARD

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

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# SUPERMARKET MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# OLD AGE HOME MANAGEMENT

**A Project Report Submitted To The Madurai Kamaraj University**

**In Partial Fulfillment for the Award of the Degree**

**BACHELOR OF COMPUTER APPLICATION**

**(2017-2020)**

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# E-BUS PASS REGISTRATION RENEWAL

Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfilment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

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# ROAD TRANSPORT MANAGEMENT SYSTEM

A Project Report Submitted to The Madurai Kamaraj University

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**BACHELOR OF COMPUTER APPLICATIONS**

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# MEDICAL SHOP MANAGEMENT SYSTEM

## BASED ON CRM

A Project Report Submitted to the Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTERAPPLICATIONS**

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# TOUR PLANNING ANDROID APPLICATION (OFFLINE)

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# FASHION SHOPPING

A Project Report Submitted To the Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

(2017-2020)

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# CAKE AND ICE CREAM SHOP

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In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# ONLINE PASTRY SHOP

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In Partial Fulfillment for the Award of the Degree

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# ONLINE ADVERTISING PORTAL

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

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# PRO-DIGI

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In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMPUTER APPLICATIONS**

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# BOOKSHOP MANAGEMENT SYSTEM

A Project Report Submitted To The Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

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# WEB BASED SPA MANAGEMENT

A Project Report Submitted To The Madurai Kamaraj University

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| 26 | 17BIT31 | V.KAMESHWARAN | 15 |
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| 29 | 17BIT36 | V.MAHALAKSHMI | 24 |
| 30 | 17BIT37 | A.MALIK BROOSKHAN | 15 |
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| 33 | 17BIT41 | N.MOHAMED THOWFEEQ | 18 |
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| 36 | 17BIT46 | P.NISHANTH | 20 |

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| 38 | 17BIT48 | NA.PRINCELIN RAJ KUMAR | 23 |
| 39 | 17BIT49 | R.PRIYADHARSHINI | 25 |
| 40 | 17BIT51 | N.RAJESH GOWTHAM | 19 |
| 41 | 17BIT52 | M.RAJKUMAR | 23 |
| 42 | 17BIT53 | M.RANJTIH KUMAR | 15 |
| 43 | 17BIT54 | L.ROHITH VISWA | 25 |
| 44 | 17BIT55 | M.SHAKILA PARVEEN | 25 |
| 45 | 17BIT56 | S.SONASRI | 20 |
| 46 | 17BIT57 | K.SRI RAM | 20 |
| 47 | 17BIT58 | S.STEPHENDASS | 17 |
| 48 | 17BIT59 | V.SUGUMAR | AB |
| 49 | 17BIT61 | P.SURYA | 18 |
| 50 | 17BIT62 | TM.VIGNESH | 23 |
| 51 | 17BIT63 | R.Vishal Raj | 17 |
| 52 | 17BIT64 | N.VISHNU | 18 |
| 53 | 17BIT65 | S.VISHVA | 17 |
| 54 | 17BIT67 | P.JONATHAN | 15 |
| 55 | 17BIT68 | P.KRITHISH DATT | 17 |
| 56 | 17BIT69 | A.SYED BAVA BAKRUDEEN | AB |

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# PHYTOCHEMICAL ANALYSIS OF SELECTED MEDICINAL PLANTS

*A Dissertation submitted by*

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M. MAHENDRA KRISHNAN (17 BOT 30)

P.PADAIYAPPA (17 BOT 37)

C.RAHULDRAVID (17 BOT 42)

M.SUBASH (17 BOT 50)

M.UDHAYAERWARAN (17 BOT 53)

S.ARU KUMAR (17 BOT 60)

N. THANGA GANESHAN (17 BOT 61)

To

THE AMERICAN COLLEGE

(An Autonomous Institution Affiliated to the Madurai Kamaraj university) in partial fulfillment of the requirements for the degree of

BACHELOR OF SCIENCE IN BOTANY

DEPARTMENT OF BOTANY

THE AMERICAN COLLEGE

MADURAI - 625 002

## Certificate

This is to certify that the project titled "**PHYTOCHEMICAL ANALYSIS OF SELECTED MEDICINAL PLANTS** " submitted to The American College, in partial fulfillment of the requirement for the award of Bachelor of Science in Botany done by P. BALAKRISHNAN (17BOT10), B.JEYARAMAN (17 BOT 21), M. MAHENDRA KRISHNAN (17BOT30), PADAIYAPPA (17 BOT 37), C.RAHULDRAVID (17 BOT 42), M.SUBASH (17 BOT 50), M.UDHAYAESWARAN (17 BOT 53), S.ARUN KUMAR (17 BOT 60), N.THANGA GANESHAN (17BOT 61) is a bonafide work and was done under my supervision.

25/09/2020

Head of the Department (UG)

25/9/20

Signature of the Guide

Dr. M.DHANASEKARAN M.Sc., Ph.D.,
Assistant Professor,
Department of Botany,
The American College, Madurai.

THE AMERICAN COLLEGE MADURAI

DEPARTMENT OF BOTANY
25 SEP 2020
THE AMERICAN COLLEGE

# STUDY ON EFFECT OF INTEGRATED NUTRIENT MANAGEMENT ON *Vigna ungiculata*

**A dissertation submitted to The American College, Madurai in partial fulfillment of the Degree of Bachelor of Science in Botany**


M. Balamurugan (17BOT08)

P. Harishath kumar (17BOT17)

R. Jeeva Suriya (17BOT20)

B. Karthik raja (17BOT26)

K. Nagapradeep (17BOT35)

S.B.S. Ponnambalam (17BOT40)

N. Sethupathi raja (17BOT47)

R. Vishnu (17BOT58)


**Under the Guidance of**

**Dr.A.BALAMURUGAN**

**Since 1881**


**Department of Botany**

**THE AMERICAN COLLEGE**

RE – ACCREDITED (2nd CYCLE) BY NAAC WITH GRADE "A"

CGPA – 3.46 ON A4 – POINT SCALE

MADURAI – 625002


APRIL - 2020

# CERTIFICATE

This is to certify that the dissertation entitled, " Study on effect of Integrated Nutrient Management on *Vigna unguiculata*" submitted by M. Balamurugan (17BOT08), P.Harishathkumar (17BOT17), R.JeevasSuriya (17BOT20), B.Karthikraja (17BOT26), K.Nagapradeep (17BOT35), S.B.S.Ponnambalam (17BOT40), N.Sethupathi raja (17BOT47), R.Vishnu (17BOT58) for the partial fulfilment of the Degree of Bachelor of Science in Botany at The American Collage, Madurai is based on the original work carried out by us under my guidance and supervision of Dr.A.Balamurugan, Assistant Professor in the Department of Botany, The American Collage, Madurai and I also declare that this work has not been submitted else where for the award of any other degree.

25/09/2020

**Dr. S. Rajkumar Immanuel**
**Head Of Department (U.G),**
**Department of Botany,**
**The American College,**
**Madurai – 625002.**

25/09/20

**Dr.A.BALAMURUGAN,**
Assistant Professor,
Research Guide,
Department of Botany,
The American College,
Madurai – 625002

THE AMERICAN COLLEGE · MADURAI ·

DEPARTMENT OF BOTANY
25 SEP 2020
THE AMERICAN COLLEGE

# A PRELIMINARY ASSESSMENT OF PHYTOCHEMICAL CONSTITUENTS IN TWO COMMON TRADITIONAL MEDICINAL PLANTS OF MADURAI DISTRICT

A Research Project Report submitted to

**THE AMERICAN COLLEGE (AUTONOMOUS), MADURAI**

affiliated to the **Madurai Kamaraj University, Madurai**

In partial fulfillment of the Requirement for the award of the

Degree of

**BACHELOR OF SCIENCE**

in

**BOTANY**

Submitted By


**M. BALA SUNDAR (17BOT09)**

**A. ILAIYARAJA (17BOT18)**

**N.S. KANAGAMANI PURUSOTH (17BOT24)**

**K. KAVIYARASAN (17BOT27)**

**V. NAVEEN KUMAR (17BOT36)**

**T. PRABAHARAN (17BOT41)**

**J. SHAJAN AMEER HAMZA (17BOT48)**

**M.YOGESHWARAN (17BOT59)**


Since 1881


**DEPARTMENT OF BOTANY**

**THE AMERICAN COLLEGE MADURAI – 625002**

**APRIL, 2020**

## Certificate

This is to certify that the project titled "**A preliminary assessmeat of phytochemical constituents in two common traditional medicinal plants of Madurai District**" submitted to The American College, in partial fulfillment of the requirement for the award of Bachelor of Science in Botany done by **M. BALA SUNDAR (17BOT09), A. ILAIYARAJA (17BOT18), N.S. KANAGAMANI PURUSOTH (17BOT24), K. KAVIYARASAN (17BOT27), V. NAVEEN KUMAR (17BOT36), T. PRABAHARAN (17BOT41), J. SHAJAN AMEER HAMZA (17BOT48) & M. YOGESHWARAN (17BOT59)** is a bonafide work and was done under my supervision.

Head of the Department (UG)

Signature of the Guide

Dr. J. THAMBIRAJ M.Sc., M.Phil., Ph.D.,

Assistant Professor,

Department of Botany,

The American College, Madurai.

THE AMERICAN COLLEGE MADURAI

DEPARTMENT OF BOTANY

25 SEP 2020

THE AMERICAN COLLEGE

# A STUDY OF FOLKLORE MEDICINES AND MEDICINAL PRACTICES IN SELECTIVE VILLAGES

A Project submitted to the Department of botany

in the partial fulfillment of the requirement for the

Degree of Bachelor of Science


By

Anand. G(17BOT04)

Hariharan. L (17BOT16)

Iyyaparaja. A(17BOT19)

Kalil rahuman. J(17BOT23)

Muthuchezhian. P(17BOT34)

Pesvan. T(17BOT39)

Santhosram. R.P(17BOT46)

Thennavan. V(17BOT52)




SINCE 1881


Department of Botany

THE AMERICAN COLLEGE,MADURAI.

(An Autonomous Affilated to Madurai Kamaraj University)

Re-accrediated(2nd Cycle)by NAAC with Grade "A",CGPA-3,46 On a4-point scale


APRIL 2020

Department of Botany,

The American College,

Madurai- 625002.

# CETRIFICATE

. This is to be certify that the project work entitled " A Study of folklore medicines and medicinal practices in selected villages " submitted by Anand. G, Iyyaparaja. A, Hariharan. L, kalil rahuman. J, Muthuchezhian. P, Pesvan. T, Santhosram. R.P , Thennavan. V, an original research work done by them during the period 2019-20 in the Department of Botany, The American College, Madurai under my guidance and supervision in the requirement for the Degree of Bachelor of science and the project work has not formed the basis for theaward previously of any degree, diploma associateship, fellowship or any other similar title.

Signature of Head of the Department

(Prof.S. Rajkumar Immunauel)

K.C.M. Esthereni 26/9/20.

Signature of the Guide

(Prof.Mrs.K.C.M. Esther Rani)

THE AMERICAN COLLEGE · MADURAI ·

Place: Madurai.

Date: 26.9.20

DEPARTMENT OF BOTANY
26 SEP 2020
THE AMERICAN COLLEGE

# Preliminary Phytochemical Screening and *In Vitro* Propagation of *Isoetes coromendelina* L.

A Research Project Report submitted to the

**THE AMERICAN COLLEGE (AUTONOMOUS), MADURAI**

affiliated to the **Madurai Kamaraj University, Madurai.**

In partial fulfilment of the Requirement for the award of the Degree of

**BACHELOR OF SCIENCE**

in

**BOTANY**


Submitted By

**G.S. AJITH KUMAR (17BOT03)**
**S.DHIVAKAR (17BOT12)**
**B.GAJENDRAN (17BOT14)**
**S.JOYAL (17BOT22)**
**M.MURALIKRISHNAN (17BOT32)**
**K.PALANIMURUGAN (17BOT38)**
**N.SAKTHIVEL (17BOT45)**
**K.SUBRAMANIYAN (17BOT51)**


Since 1881


**DEPARTMENT OF BOTANY**
**THE AMERICAN COLLEGE**
**Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA-3.46 on a 4 point scale**
(An Autonomous Institution affiliated to Madurai Kamaraj University)
**MADURAI – 625 002.**
**(TAMIL NADU, INDIA)**


**APRIL 2020**

# CERTIFICATE

This is to certify that the project entitled "**Preliminary Phytochemical Screening and *In Vitro* Propagation of *Isoetes coromendelina L.***" being submitted by **G.S. AJITH KUMAR (17BOT03), S.DHIVAKAR (17BOT12), B.GAJENDRAN (17BOT14), S.JOYAL (17BOT22), M.MURALIKRISHNAN (17BOT32), K.PALANIMURUGAN (17BOT38), N.SAKTHIVEL (17BOT45) K.SUBRAMANIYAN (17BOT51),** students of full time Bachelor of Science in Botany, The American College (Autonomous), Madurai, affiliated to the Madurai Kamaraj University, Madurai, is a *bonafide* record work carried out done by them .It was supervised and approved by us.

**MS.J.NITHYA KAMALAM**
Project Guide

25.09.2020

**DR.S.RAJKUMAR IMMANUEL**
Head (UG)

THE AMERICAN COLLEGE · MADURAI ·

DEPARTMENT OF BOTANY
25 SEP 2020
THE AMERICAN COLLEGE

# CHARACTERIZATION OF NEW AND NOVEL ISOLATES OF *PSEUDOMONAS FLUORESCENS* STRAINS AS A POTENTIAL BIOCONTROL AGENT AGAINST *COCHLIOBOLUS MIYABEANUS*

A Project Report submitted to the
Department of Botany
In the partial fulfillment of the requirement for the
Degree of Master of Science

*By*

Dharshini.N (18PGB05)
Huldah Pearlin Sarah.L (18PGB06)
Madhi Roja. P.S (18PGB07)

DEPARTMENT OF BOTANY
THE AMERICAN COLLEGE, MADURAI.
(An Autonomous Institution
Affiliated to Madurai Kamaraj University)
MAY 2020

# CERTIFICATE

This to certify that the dissertation entitled "**Effect of Biofertilizers on Seed Germination, Growth and Yield of Sesame *(Sesamum indicum)*"** is a bonafide research work done by **Sharmila.G, Sivajothi.P,** under the supervision and guidance of **Mrs.P.Gunasundari,** Assistant Professor, Department of Botany, The American College, Madurai during the academic year 2019-2020

**Mrs. P. GUNA SUNDARI**

**(Project Guide)**

**Dr. G.C. ABRAHAM**

**(Prof. and Head P.G, Dept of Botany)**

**PLACE : MADURAI**

**DATE :** 28.09.2020

# EFFECT OF BIOFERTILIZERS ON SEED GERMINATION, GROWTH AND YIELD OF SESAME (*Sesamum indicum*)

A Dissertation submitted to The American College
(An Autonomous Institution affiliated to the Madurai Kamaraj University)
in partial fulfillment of the requirements for the award of the degree of

**MASTER OF SCIENCE IN BOTANY**

**BY**

**G.SHARMILA (18PGB15)**

**P.SIVAJOTHI (18PGB17)**




**POST GRADUATE & RESEARCH DEPARTMENT OF BOTANY**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002.**

**APRIL 2020.**

# POLLEN ATLAS OF TREE SPECIES IN THE AMERICAN COLLEGE CAMPUS, MADURAI, TAMILNADU

Dissertation submitted to
The American College, Madurai
(An Autonomous Institution Affiliated to Madurai Kamaraj University, Madurai)
For the partial fulfilment of the requirements
for the degree of

MASTER OF SCIENCE IN BOTANY

BY,

**MATHUMITHA N (18PGB08)**

**SELVAKUMAR T (18PGB14)**

**SUBALAKSHMI K (18PGB18)**

POST GRADUATE AND RESEARCH DEPARTMENT OF BOTANY
THE AMERICAN COLLEGE
MADURAI 625 002
MAY 2020

POST GRADUATE & RESEARCH DEPARTMENT OF BOTANY
THE AMERICAN COLLEGE, MADURAI 625 002

*Dr.D.STEPHEN,Ph.D.*
Assistant Professor

## *CERTIFICATE*

Certified that this dissertation entitled ***"POLLEN ATLAS OF TREE SPECIES IN THE AMERICAN COLLEGE CAMPUS, MADURAI, TAMILNADU"*** submitted by **Mathumitha, N. (18 PGB 08), Selvakumar, T. (18 PGB 14) and Subalakshmi, K. (18 PGB 18)**to The American College, Madurai for the degree of Master of Science in Botany is based on the result of the studies originally carried out by them under my guidance and supervision during 2019-2020. This dissertation of any part there of has not been submitted elsewhere for any other degree

Madurai
05.06.2020

**Dr.D.STEPHEN**
Asst.professor

**Dr.G.C.ABRAHAM**
(Head, Department of Botany)

The Head - PG
Department of Botany
The American College
Madurai - 625 002

# CERTIFICATE

This is to certify that this dissertation entitled **"Studies on Fungal Endophytes in Tea (*Camellia sinensis* (L.)O.Kuntze.)"** submitted by R.Alagupandi (18PGB02), M.Dharani (18PGB04) and K.Velmurugan (18PGB20)as a partial fulfillment for the Degree of Master of Science in Botany is based on the studies carried out by them under my guidance and supervision. This dissertation or any part thereof has not been submitted elsewhere for any other degree.

**Dr. G.C.Abraham**
Vice Principal &Head
PG and Research
Department of Botany
The American College
Madurai – 625 002

The Head - PG
Department of Botany
The American College
Madurai - 625 002

**Dr. R.Sanjay**
Assistant Professor
Project guide
Department of Botany
The American College
Madurai – 625 002

**Place:** Madurai

**Date:** 24.09.2020

# CERTIFICATE

This is to certify that the project entitled "**Phytochemical Investigation and Screening for Bioactive Compounds from *Guaiacum officinale L.***" being submitted by **BHUVAN SAKTHIVEL.M (18PGB03), NACHIYAPPAN.C (18PGB09), PRINCY REETA.J (18PGB11)** students of full time Master of Science in Botany, The American College (Autonomous), Madurai, affiliated to the Madurai Kamaraj University, Madurai, is a *bonafide* record work carried out done by them .It was supervised and approved by us.

**MS.J.NITHYA KAMALAM**
Project Guide

**DR.G.C.ABRAHAM**
Vice-Principal & Head (PG)

The Head - PG
Department of Botany
The American College
Madurai - 625 002

# Studies on fungal endophytes in tea (*Camellia sinensis* (L.)O. Kuntze.)

A project report submitted to the

Department of Botany, The American College , Madurai

For the Degree of Master Science in Botany

BY


**R.ALAGUPANDI (18PGB02)**

**M.DHARANI (18PGB04)**

**K.VELMURUGAN (18PGB20)**


Under the guidance of

**Dr.R.SANJAY**


POST GRADUATE AND RESEARCH

DEPARTMENT OF BOTANY

THE AMERICAN COLLEGE, MADURAI – 625 002


**APRIL 2020**

# Phytochemical Investigation and Screening for Bioactive Compounds from *Guaiacum officinale L.*

A Dissertation submitted to the

**THE AMERICAN COLLEGE (AUTONOMOUS), MADURAI**

affiliated to the **Madurai Kamaraj University, Madurai,**

In partial fulfilment of the Requirement for the award of the Degree of

**MASTER OF SCIENCE**

in

**BOTANY**


Submitted By

**BHUVAN SAKTHIVEL.M (18PGB03)**

**NACHIYAPPAN.C (18PGB09)**

**PRINCY REETA.J (18PGB11)**


Since 1881


**POSTGRADUATE DEPARTMENT OF BOTANY**

**THE AMERICAN COLLEGE**

**Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA-3.46 on a 4 point scale**

(An Autonomous Institution affiliated to Madurai Kamaraj University)

**MADURAI – 625 002.**

**(TAMIL NADU, INDIA)**


**APRIL 2020**

Department of Botany,
The American College,
Madurai – 625 002.

# Certificate

This is to certify that the project work entitled "Characterization of new and novel isolates of *Pseudomonas fluorescens* strains as a potential biocontrol agent against *Cochliobolus miyabeanus*" is submitted by Dharshini. N (18PGB05), Huldah Pearlin Sarah.L (18PGB06) & Madhi Roja. P.S (18PGB07) an original research work done by them during the period 2018-2020 in the Research and Post Graduate Department of Botany, The American College, Madurai under my guidance and supervision in the fulfillment of the requirement for the Degree of Master of Science and the project work has not formed the basis for the award previously of any degree, diploma, associateship, fellowship or any other similar title.

Signature of Head of the Department
(Dr.G.C.Abraham)

The Head
Department of Botany
The American College
Madurai - 625 002

Signature of the Project Supervisor
(Dr.J.Ebenexar Immanuel)

Place: Madurai

Date: 24-09-2020

# STUDY ON CULTURE AND ETHNOMEDICINAL PRACTICES OF PALIYAR TRIBAL COMMUNITY AT KURINJI NAGAR, USILAMPATTI, MADURAI

A dissertation submitted by

G. PRADEEP 18PGB10

K. RAJESHKANNA 18PGB12

M. SILVIYA JENCY 18PGB16

to

THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj University)

in partial fulfilments of the requirements for the degree of

MASTER OF SCIENCE IN BOTANY

POST GRADUATE DEPARTMENT OF BOTANY

THE AMERICAN COLLEGE

MADURAI – 625002

APRIL 2020

# CERTIFICATE

This is to certify that the project entitled '**Study on culture and ethnomedicinal practices of the paliyar tribal community at kurinji nagar, Usilampatti, Madurai'** is a bonafide research work done by G. Pradeep, K. Rajeshkanna, M. Silviya jency, under the supervision and guidance of Mrs.K.C.M. Esther Rani, Assistant professor, Department of Botany, The American College, Madurai during the academic year.

K.C.M. Esther Rani 28/9/20

**Mrs. K.C.M. ESTHER RANI**
**(Project Guide)**

**Dr. G.C.ABRAHAM**
**(Prof and Head,**
**PG. Dept of Botany)**

The Head - PG
Department of Botany
The American College
Madurai - 625 002

**PLACE : MADURAI**

**DATE :** 28.9.2020

SUN TV NETWORK LIMITED

Murasoli Maran Towers, 73, MRC Nagar Main Road, MRC Nagar, Chennai - 600 028, India.
Tel : +91-44-4467 6767, Fax : +91-44-4067 6161, E-mail: tvinfo@sunnetwork.in
Website: www.suntv.in CIN.: L22110TN1985PLC012491

2nd January 2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Surya has successfully completed internship Program from 2/12/2019 to 2/01/2020 . He was working in the programming department of Sun Music and was actively & diligently involved in the projects and task assigned to him .

During the internship period we found him to be sincere and hardworking. He had a professional attitude and very good job knowledge.

We wish a bright future.

**For Sun TV Network Limited,**

**Authorised Signatory**

Scanned by TapScanner

December 31, 2019.

# Certificate for Media Internship Training

This is to certify that **Mr. P. Ajith Kumar,** a bonafide student of **B.Sc. (Visual Communication)** in **The American College, Madurai – 625002**, with Register No. 17BVC03 has done his internship in our Organization during the period from December 1, 2019 to December 31, 2019.

During this tenure of training, Mr. P. Ajith Kumar was found to be attentive and of enterprising nature and his conduct and character has been uniformly good.

**For KALAIGNAR TV PVT. LTD.,**

**R.C. SWAMINATHAN**
**General Manager – Admin & HR.**

**Kalaignar TV Pvt. Ltd.,** Anna Arivalayam, No.367/369, Anna Salai, Teynampet, Chennai - 600 018.
Tel : 044 - 2430 7777 Fax : 044 - 2433 5053 Web: www.kalaignartv.co.in
**CIN: U92100TN2007PTC063806**

EMAIL : jaiacchari@gmail.com
MOBILE : 9894575593

INHOUSE PRODUCTIONS

**DATE:** 02.01.2020

## TO WHOMSOEVER ITMAY CONCERN

**This is certify that Mr. M.GOPAL , a Student of The American College, Madurai ,has successfully completed an internship program (From 02/12/2019 to 02/01/2020). He was working in the direction team and production team. During the period of his internship programme with us he was found punctual, hardworking and inquisitive.**

**We wish a bright future.**

**PRABAKARAN.K**

**(creative head)**

INHOUSE PRODUCTIONS Chennai 600 040

Brindhavanam Apartments , MIG 8/2 , Near KK nagar Depot , KK nagar , Chennai-600078.

December 31, 2019.

# Certificate for Media Internship Training

This is to certify that **Mr. J. Ram Eshwar,** a bonafide student of **B.Sc. (Visual Communication)** in **The American College, Madurai – 625002**, with Register No. 17BVC43 has done his internship in our Organization during the period from December 11, 2019 to December 31, 2019.

During this tenure of training, Mr. J. Ram Eshwar was found to be attentive and of enterprising nature and his conduct and character has been uniformly good.

**For KALAIGNAR TV PVT. LTD.,**

**R.C. SWAMINATHAN**
**General Manager – Admin & HR.**

**Kalaignar TV Pvt. Ltd.,** Anna Arivalayam, No.367/369, Anna Salai, Teynampet, Chennai - 600 018.
Tel : 044 - 2430 7777 Fax : 044 - 2433 5053 Web: www.kalaignartv.co.in
**CIN: U92100TN2007PTC063806**

December 31, 2019.

# Certificate for Media Internship Training

This is to certify that **Mr. G. Sudharsan,** a bonafide student of **B.Sc.** (**Visual Communication**) in **The American College, Madurai – 625002**, with Register No. 17BVC53 has done his internship in our Organization during the period from December 11, 2019 to December 31, 2019.

During this tenure of training, Mr. G. Sudharsan was found to be attentive and of enterprising nature and his conduct and character has been uniformly good.

**For KALAIGNAR TV PVT. LTD.,**

**R.C. SWAMINATHAN**
**General Manager – Admin & HR.**

**Kalaignar TV Pvt. Ltd.,** Anna Arivalayam, No.367/369, Anna Salai, Teynampet, Chennai - 600 018.
Tel : 044 - 2430 7777 Fax : 044 - 2433 5053 Web: www.kalaignartv.co.in
**CIN: U92100TN2007PTC063806**

December 31, 2019.

# Certificate for Media Internship Training

This is to certify that **Mr. R. Paari Mannan,** a bonafide student of **B.Sc.** (**Visual Communication**) in **The American College, Madurai – 625002**, with Register No. 17BVC63 has done his internship in our Organization during the period from December 11, 2019 to December 31, 2019.

During this tenure of training, Mr. R. Paari Mannan was found to be attentive and of enterprising nature and his conduct and character has been uniformly good.

**For KALAIGNAR TV PVT. LTD.,**

**R.C. SWAMINATHAN**
**General Manager – Admin & HR.**

**Kalaignar TV Pvt. Ltd.,** Anna Arivalayam, No.367/369, Anna Salai, Teynampet, Chennai - 600 018.
Tel : 044 - 2430 7777 Fax : 044 - 2433 5053 Web: www.kalaignartv.co.in
**CIN: U92100TN2007PTC063806**

January 3, 2020.

# Certificate for Media Internship Training

This is to certify that **Mr. J. Jegath Vishwa,** a bonafide student of **B.Sc.** (**Visual Communication**) in **The American College, Madurai – 625002**, with Register No. 17BVC20 has done his internship in our Organization during the period from December 4, 2019 to January 3, 2020.

During this tenure of training, Mr. J. Jegath Vishwa was found to be attentive and of enterprising nature and his conduct and character has been uniformly good.

**For KALAIGNAR TV PVT. LTD.,**

**R.C. SWAMINATHAN**
**General Manager – Admin & HR.**

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**Asianet Star Communications Pvt. Ltd.**
(Formerly known as Vijay Television Pvt. Ltd.)
Kochar Jade, Plot No. 22, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Tel : +91 44 6121 4050

விஜய்

Ref. No.: HR/ INCO/ Jan 20/06

**Date:** 02-01-2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Yogesh vel M**, pursuing B.Sc Visual Communication from The American College has completed his internship training from 04/12/2019 to 31/12/2019 within **Fiction** Department at our organization.

We wish him all the best for his future endeavors.

**For Asianet Star Communications Pvt. Ltd.,**

Saravanan Palaniappan

**Senior Manager - Human Resources**

AWESTRUCK STUDIOS

January 08, 2020

**INTERNSHIP COMPLETION LETTER**

Respected Madam/Sir,

We hereby certify that **Mr.R.P.S.Bala Atsaran** (Roll No.17BVC62) a student of **Visual Communication** Department in **The American College, Madurai.** He has successfully completed his intership in our organization from the time period from **02 December 2019 to 08 January 2020**. He had his training in our studio including Editing, Photo manupulation, Studio lighting setup, Advanced photography technique.

Thanking you

**For Awestruck Studios**

**Aro Lourdson Leo. R**

CEO of Awestruck Studios.

Plot No: 4, Second Floor, Avvai Street, Mahalakshmi Nagar, East tambaram, Chennai-600 073.

MERCURY
NETWORKS
No.141, RAMS APERTMENTS,
FLAT No: 12, 2ND FLOOR, ELDAMS ROAD,
TEYNAMPET, CHENNAI – 600 018.
Ph.: 044- 24360898, 24351086

**04th Jan 2020**

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Priya. C (17BVC38)**, student The American College (Madurai), has undergone internship training at **Vijay Television's NEEYA? NAANA?** Programme from **Dec 13th 2019 to Jan 05th 2020.** During the period she had on-hand experience in pre-production and production.

Regards,

MERCURY NETWORKS Chennai 600 018.

**for Mercury Networks**

# Jaya surya cable communication

Mrs.R.Amutha B.Com
5,Dhanappa Mudalli Street,
Madurai-625001.
Ph:0452-2343678

Date:05/01/2020

## To whom it may concern

This is to certify that Mr.V.Bala Prabhu (17BVC11) a student of visual communication from The American college has successfully completed one month (from 01/12/2019 to 31/12/2019) long internship program at this company.

During the period of his internship program with us he was working with technical works and editing. He was very punctual, hardworking and inquisitive in the given work.

We wish him all the best for his future endeavours.

Authorised signature

JAYASURYA COMMUNICATION
5, Dhanappa Mudali Street,
Madurai-625001.
Cell: 94422 23334

# Jaya surya cable communication

Mrs.R.Amutha B.Com
5,Dhanappa Mudalli Street,
Madurai-625001.
Ph:0452-2343678

Date:05/01/2020

## To whom it may concern

This is to certify that Mr.R.Vishnu Viyaas (17BVC60) a student of visual communication from The American college has successfully completed one month (from 01/12/2019 to 31/12/2019) long internship program at this company.

During the period of his internship program with us he was working with technical works and editing. He was very punctual, hardworking and inquisitive in the given work.

We wish him all the best for his future endeavours.

Authorised signature

S. Ravichandran.

JAYASURYA COMMUNICATION
6, Dhanappa Mudali Street,
Madurai-625001.
Cell: 94422 23334

(Formerly known as Vijay Television Pvt. Ltd.)
Kochar Jade, Plot No. 22, Thiru Vi Ka Industrial Estate,
Guindy, Chennai - 600 032.
Tel : +91 44 6121 4050

விஜய்

Ref. No.: HR/ INCO/ Jan 20/07

**Date:** 02-01-2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Raja kumar B**, pursuing B.Sc Visual Communication from The American College has completed his internship training from 04/12/2019 to 31/12/2019 within **Fiction** Department at our organization.

We wish him all the best for his future endeavors.

**For Asianet Star Communications Pvt. Ltd.,**

**Saravanan Palaniappan**

**Senior Manager - Human Resources**

MAVIS SATCOM LIMITED
#48 NP. Jawaharlal Nehru Salai, Ekkaduthangal, Chennai - 600 032. India
C : +91 044 43960000, email : info@jayanetwork.in
visit us @ www.jayanetwork.in




31st December 2019

This is to certify that **Mr. Abikanna G (17BVC01)** from **THE AMERICAN COLLEGE, Madurai** has successfully completed his internship with us from **02nd Dec to 31st Dec 2019.**

He has learnt the nuances of Graphic Design and has been keenly involved in the Web Department.

We wish him success in his future endeavours.

Thanking you!

for Nathan

Yours Sincerely,

ViswaNathan DevaRaj

Head – Sales & Marketing.

JAYA T.V.
MARKETING DIVISION
No. 48, NP JAWAHARLAL NEHRU SALAI
EKKADUTHANGAL,
CHENNAI - 600 097

MAVIS SATCOM LIMITED
#48 NP. Jawaharlal Nehru Salai, Ekkaduthangal, Chennai - 600 032. India
C : +91 044 43960000, email : info@jayanetwork.in
visit us @ www.jayanetwork.in




31st December 2019

This is to certify that **Mr. Abikanna G (17BVC01)** from **THE AMERICAN COLLEGE, Madurai** has successfully completed his internship with us from **02nd Dec to 31st Dec 2019.**

He has learnt the nuances of Graphic Design and has been keenly involved in the Web Department.

We wish him success in his future endeavours.

Thanking you!

for Nathan

Yours Sincerely,

ViswaNathan DevaRaj

Head – Sales & Marketing.

JAYA T.V.
MARKETING DIVISION
No. 48, NP JAWAHARLAL NEHRU SALAI
EKKADUTHANGAL,
CHENNAI - 600 097

December 31, 2019.

# Certificate for Media Internship Training

This is to certify that **Mr. M. Karthick Raja,** a bonafide student of ***B.Sc.*** (***Visual Communication***) in **The American College, Madurai – 625002**, with Register No. 17BVC25 has done his internship in our Organization during the period from December 1, 2019 to December 31, 2019.

During this tenure of training, Mr. M. Karthick Raja was found to be attentive and of enterprising nature and his conduct and character has been uniformly good.

**For KALAIGNAR TV PVT. LTD.,**

**R.C. SWAMINATHAN**
**General Manager – Admin & HR.**

**Kalaignar TV Pvt. Ltd.,** Anna Arivalayam, No.367/369, Anna Salai, Teynampet, Chennai - 600 018.
Tel : 044 - 2430 7777 Fax : 044 - 2433 5053 Web: www.kalaignartv.co.in
**CIN: U92100TN2007PTC063806**

January 3, 2020.

# Certificate for Media Internship Training

This is to certify that **Mr. K. Arun Pandian,** a bonafide student of **B.Sc. (Visual Communication)** in **The American College, Madurai – 625002**, with Register No. 17BVC06 has done his internship in our Organization during the period from December 4, 2019 to January 3, 2020.

During this tenure of training, Mr. K. Arun Pandian was found to be attentive and of enterprising nature and his conduct and character has been uniformly good.

**For KALAIGNAR TV PVT. LTD.,**

**R.C. SWAMINATHAN**
**General Manager – Admin & HR.**

**Kalaignar TV Pvt. Ltd.,** Anna Arivalayam, No.367/369, Anna Salai, Teynampet, Chennai - 600 018.
Tel : 044 - 2430 7777 Fax : 044 - 2433 5053 Web: www.kalaignartv.co.in
**CIN: U92100TN2007PTC063806**

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January 3, 2020.

# Certificate for Media Internship Training

This is to certify that **Mr. K. Arun Pandian,** a bonafide student of **B.Sc. (Visual Communication)** in **The American College, Madurai – 625002**, with Register No. 17BVC06 has done his internship in our Organization during the period from December 4, 2019 to January 3, 2020.

During this tenure of training, Mr. K. Arun Pandian was found to be attentive and of enterprising nature and his conduct and character has been uniformly good.

**For KALAIGNAR TV PVT. LTD.,**

**R.C. SWAMINATHAN**
**General Manager – Admin & HR.**

**Kalaignar TV Pvt. Ltd.,** Anna Arivalayam, No.367/369, Anna Salai, Teynampet, Chennai - 600 018.
Tel : 044 - 2430 7777 Fax : 044 - 2433 5053 Web: www.kalaignartv.co.in
**CIN: U92100TN2007PTC063806**

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ZERO GRAVITY
PHOTOGRAPHY

DATE: 13/01/2020

# CERTIFICATE

This is to certify that NAGA SANTHOSH M, BSC Visual Communication of The Madurai American College, Madurai, has successfully completed 1 month of the internship on "Color Correction / photography" at Zero Gravity Photography from 01/12/2019 to 30/12/2019.

**For Zero Gravity Photography**

13/01/2020

**HEAD – ADMIN & OPERATIONS**

**(Navin Prakash C)**

No. 50/42 Josier Street, Nungambakkam, Chennai
www.zerogravity photography | +91 9840767566

# SUN TV NETWORK LIMITED

Murasoli Maran Towers, 73, MRC Nagar Main Road, MRC Nagar, Chennai - 600 028, India.
Tel : +91-44-4467 6767, Fax : +91-44-4067 6161, E-mail: tvinfo@sunnetwork.in
Website: www.suntv.in CIN.: L22110TN1985PLC012491


10th January 2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Naveen Kumar I pursuing final year B.Sc Viscom in The American College has successfully completed his internship program from 11/12/2019 to 10/01/2020. He was working in the Programming department-Fiction team of Sun TV and was actively & diligently involved in the projects and task assigned to him.

During the internship period we found him to be sincere and hardworking with a professional attitude and very good job knowledge.

We wish him a bright future.

**For Sun TV Network Limited,**

**Authorised Signatory**

AWESTRUCK STUDIOS

January 08, 2020

**INTERNSHIP COMPLETION LETTER**

Respected Madam/Sir,

We hereby certify that **Mr.N.Praveen** (Roll No.17BVC36) a student of **Visual Communication** Department in **The American College, Madurai.** He has successfully completed his intership in our organization from the time period from **02 December 2019 to 08 January 2020**.
He had his training in our studio including Editing, Photo manupulation, Studio lighting setup, Advanced photography technique.

Thanking you

**For Awestruck Studios**

**Aro Lourdson Leo. R**

CEO of Awestruck Studios.

Plot No: 4, Second Floor, Avvai Street, Mahalakshmi Nagar, East tambaram, Chennai-600 073.

AWESTRUCK STUDIOS

January 08, 2020

**INTERNSHIP COMPLETION LETTER**

Respected Madam/Sir,

We hereby certify that **Mr.R.P.S.Bala Atsaran** (Roll No.17BVC62) a student of **Visual Communication** Department in **The American College, Madurai.** He has successfully completed his intership in our organization from the time period from **02 December 2019 to 08 January 2020**. He had his training in our studio including Editing, Photo manupulation, Studio lighting setup, Advanced photography technique.

Thanking you

**For Awestruck Studios**

**Aro Lourdson Leo. R**

CEO of Awestruck Studios.

Plot No: 4, Second Floor, Avvai Street, Mahalakshmi Nagar, East tambaram, Chennai-600 073.

# SUN TV NETWORK LIMITED

Murasoli Maran Towers, 73, MRC Nagar Main Road, MRC Nagar, Chennai - 600 028, India.
Tel : +91-44-4467 6767, Fax : +91-44-4067 6161, E-mail: tvinfo@sunnetwork.in
Website: www.suntv.in CIN.: L22110TN1985PLC012491


10th January 2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Naveen Kumar I pursuing final year B.Sc Viscom in The American College has successfully completed his internship program from 11/12/2019 to 10/01/2020. He was working in the Programming department-Fiction team of Sun TV and was actively & diligently involved in the projects and task assigned to him.

During the internship period we found him to be sincere and hardworking with a professional attitude and very good job knowledge.

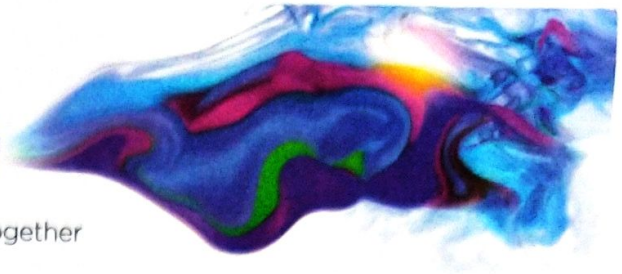
We wish him a bright future.

**For Sun TV Network Limited,**

**Authorised Signatory**

31-Dec-2019

ZEE
Extraordinary Together



## TO WHOM IT MAY CONCERN

This is to certify that **Pandiyaraja N(Reg.No-17BVC33)**, a student of The American College, Madurai was associated with Zee Entertainment Enterprises Limited from **01-Dec-2019 to 31-Dec-2019** as an Intern in the **Programming** Department.

During the period of association, he is found to be committed and his performance in the internship were found to be to the level of expectations.

For **ZEE ENTERTAINMENT ENTERPRISES LTD.**

S. Sneka.

ZEE ENTERTAINMENT ENTERPRISES LTD. ZEE TAMIZH CHENNAI-32

**HUMAN RESOURCES**

**Zee Entertainment Enterprises Limited**
Olympia Platina, No. 33B, 2nd Floor, SIDCO Industrial Estate, Guindy, Chennai - 600 032, India
P: +91 44 3919 4510 | F: +91 44 3919 4222
Regd. Office : 18th Floor, A-Wing, Marathon Futurex, N.M. Joshi Marg, Lower Parel, Mumbai - 400 013, India
CIN: L92132MH1982PLC028767 | www.zeeentertainment.com

An Essel GROUP Enterprise

31st DEC 2019

## To whomsoever it may concern

This is to certify that **VINOTHKUMAR.P** from **THE AMERICAN COLLEGE** has successfully completed his internship with us from **DECEMBER 1** to **DECEMBER 31.**

He has been worked in the **"KPY CHAMPIONS – Season 2"** aired in **VIJAY TV**. He has learnt the nuances of **CINEMATOGRAPHY.**

He has shown a keen aptitude towards television production in his tenure with us and we wish him for success in his future endeavors.

Thanking you.

THALIR CHENNAI-600083

Creative Head/Producer

**(B.Jegan)**

No 15/6, Beach Home Avenue,3rd Street Besant Nagar, Chennai -600090
PH: 044-4350 7167 , MOB: +91 98402 10400
email : mail2thalir@gmail.com

31st DEC 2019

## To whomsoever it may concern

This is to certify that **PUGAZHENDHI.B** from **THE AMERICAN COLLEGE** has successfully completed his internship with us from **DECEMBER 1** to **DECEMBER 31.**

He has been worked in the **"KPY CHAMPIONS – Season 2"** aired in **VIJAY TV**. He has learnt the nuances of **EDITING.**

He has shown a keen aptitude towards television production in his tenure with us and we wish him for success in his future endeavors.

Thanking you.

THALIR CHENNAI-600090

Creative Head/Producer

**(B.Jegan)**

No 15/6, Beach Home Avenue,3rd Street Besant Nagar, Chennai -600090
PH: 044-4350 7167 , MOB: +91 98402 10400
email : mail2thalir@gmail.com

Avenues

PLOT NO: 654, 80FT ROAD,
ANNA SAALAI,
K.K.NAGAR,
MADURAI -20.
• 91 452 4267666

24th January 2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr.N.Novfer, Visual Communication Department, The American College, has successfully completed Internship Program from 02.12.2019 to 30.12.2019 in the Programming Department of Avenues Marketing and was actively & diligently involved in the projects and task assigned to him.

For Avenues Marketing

Authorized Signatory

TEAM CREATORS

# INTERNSHIP COMPLETION LETTER

JAN 2, 2020

## TO WHOMSOEVER IT MAY CONCERN

Respected Sir/Mam,

We hereby certify that Mr. Akshay [Roll No. 17BVC04] a student of Visual Communication Department of American College, Madurai. He has successfully completed his internship in our organization from Dec 1st, 2019 to Dec 31st, 2019. He is exceptionally good, and we are extremely satisfied with his work during his internship.

Thank you.

Yours truly,

For Team Creators

Finney. P

Head - Operations

SUN TV NETWORK LIMITED
Murasoli Maran Towers, 73, MRC Nagar Main Road, MRC Nagar, Chennai - 600 028, India.
Tel : +91-44-4467 6767, Fax : +91-44-4067 6161, E-mail: tvinfo@sunnetwork.in
Website: www.suntv.in CIN.: L22110TN1985PLC012491

2nd January 2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Naveen Raaj. A has successfully completed internship Program from 2/12/2019 to 2/01/2020 . He was working in the programming department of Sun Music and was actively & diligently involved in the projects and task assigned to him .

During the internship period we found him to be sincere and hardworking. He had a professional attitude and very good job knowledge.

We wish a bright future.

**For Sun TV Network Limited,**

**Authorised Signatory**

TV18

25/12/2019

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Mr.Atheep Maideen M,** student of Bachelor n Visual Communication from The American College, Madurai, attended his internship program in our News 18 Tamil Nadu at Chennai Office from **25/11/2019 to 25/12/2019.** He was trained in the areas of Assignment Desk/Reporting.

During the period of his stay with us, we found his performance and conduct to be satisfactory.

We wish him success in all future endeavors.

**For TV18 Broadcast Limited**

**Bibhas Roy**
**Manager - HR**

**TV18 Broadcast Limited**

+91 22 40019000, 66667777
investors.n18@nw18.com
www.nw18.com
L74300MH2005PLC281753

**REGISTERED OFFICE**
First Floor, Empire Complex,
414, Senapati Bapat Marg,
Lower Parel,
Mumbai - 400 013

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புதிய தலைமுறை

**January 02, 2020**

**TO WHOMEVER IT MAY CONCERN**

This is to certify that **Ms. Poojasri D 17BVC34** has been interning with **NEW GENERATION MEDIA CORPORATION PVT LTD** in **News Program Department** from **December 04, 2019 till January 02,2020**.

During this period she has contributed to her fullest efforts and we are happy with her performance.

**With Regards,**

**Krishnan R**

**Assistant Manager – HR**

New Generation Media Corporation Private Limited Chennai

SUN TV NETWORK LIMITED
Murasoli Maran Towers, 73, MRC Nagar Main Road, MRC Nagar, Chennai - 600 028, India.
Tel : +91-44-4467 6767, Fax : +91-44-4067 6161, E-mail: tvinfo@sunnetwork.in
Website: www.suntv.in CIN.: L22110TN1985PLC012491

2nd January 2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Navaneetha Krishnan has successfully completed internship Program from 2/12/2019 to 2/01/2020 . He was working in the Non fiction department of Sun TV and was actively & diligently involved in the projects and task assigned to him .

During the internship period we found him to be sincere and hardworking. He had a professional attitude and very good job knowledge.

We wish a bright future.

**For Sun TV Network Limited,**

**Authorised Signatory**

SUN TV NETWORK LIMITED
Murasoli Maran Towers, 73, MRC Nagar Main Road, MRC Nagar, Chennai - 600 028, India.
Tel : +91-44-4467 6767, Fax : +91-44-4067 6161, E-mail: tvinfo@sunnetwork.in
Website: www.suntv.in CIN.: L22110TN1985PLC012491

2nd January 2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Navaneetha Krishnan has successfully completed internship Program from 2/12/2019 to 2/01/2020 . He was working in the Non fiction department of Sun TV and was actively & diligently involved in the projects and task assigned to him .

During the internship period we found him to be sincere and hardworking. He had a professional attitude and very good job knowledge.

We wish a bright future.

**For Sun TV Network Limited,**

**Authorised Signatory**

**Criteria I-1.3.4 Percentage of students undertaking field projects/ internship (Current Year Data) SF**

| Sl.No | rogramme Nam | Programme Code | Roll No | Name of the Student | Project Title | Projects/Internships/Field Visit | No of students enrolled |
|---|---|---|---|---|---|---|---|
| 1 | Chemistry UG | CHS | 17CHS01 | M.Aakash | Synthesis and characterization of Schiff-base ligand derived from Indole-3-carboxaldehyde and 3,4-Di-aminobenzophenone | Project | |
| 2 | Chemistry UG | CHS | 17CHS03 | M.Akash | Synthesis and characterization of Schiff-base ligand derived from Indole-3-carboxaldehyde and 3,4-Di-aminobenzophenone | Project | |
| 3 | Chemistry UG | CHS | 17CHS04 | V.Ambikapathi | Synthesis and spectral studies of Schiff base ligand based metal (Ni, Co, Cu, Zn) Complexes | Project | |
| 4 | Chemistry UG | CHS | 17CHS05 | S.Anjanadevi | Corrosion Inhibition Of Carbon Steel By Ctab In Simulated Concrete Pore Solution | Project | |
| 5 | Chemistry UG | CHS | 17CHS06 | Arun Kumar A | Synthesis Of Polysulfone - Co - Poly(Vinyl Chloride) | Project | |
| 6 | Chemistry UG | CHS | 17CHS07 | Deeparathna. N | Synthesis Of Polysulfone - Co - Poly(Vinyl Chloride) | Project | |
| 7 | Chemistry UG | CHS | 17CHS08 | G.Dharani | Corrosion Inhibition Of Carbon Steel By Ctab In Simulated Concrete Pore Solution | Project | |
| 8 | Chemistry UG | CHS | 17CHS09 | C.P.Dharani | Synthesis and characterization of Schiff-base ligand derived from Indole-3-carboxaldehyde and 3,4-Di-aminobenzophenone | Project | |
| 9 | Chemistry UG | CHS | 17CHS15 | Ilamaran. K | Synthesis Of Polysulfone - Co - Poly(Vinyl Chloride) | Project | |
| 10 | Chemistry UG | CHS | 17CHS18 | G.Jeeva Priya Dharshini | Synthesis and characterization of indole derived Copper complex | Project | |
| 11 | Chemistry UG | CHS | 17CHS19 | Jeyabharathi. R | Synthesis Of Polysulfone - Co - Poly(Vinyl Chloride) | Project | |
| 12 | Chemistry UG | CHS | 17CHS20 | K.Jeyasri | Synthesis and spectral studies of Schiff base ligand based metal (Ni, Co, Cu, Zn) Complexes | Project | |
| 13 | Chemistry UG | CHS | 17CHS21 | P.Kamali | Synthesis and characterization of indole derived Copper complex | Project | |
| 14 | Chemistry UG | CHS | 17CHS23 | Karthika. Mj | Synthesis Of Polysulfone - Co - Poly(Vinyl Chloride) | Project | |
| 15 | Chemistry UG | CHS | 17CHS24 | R.Karthikeyan | Corrosion inhibition efficiency of L-Leucine Zn2+ system on carbon steel in well water | Project | |
| 16 | Chemistry UG | CHS | 17CHS28 | S.Kiruthika | Corrosion inhibition efficiency of L-Leucine Zn2+ system on carbon steel in well water | Project | |
| 17 | Chemistry UG | CHS | 17CHS29 | M.Kulandai Velu | Synthesis and spectral studies of Schiff base ligand based metal (Ni, Co, Cu, Zn) Complexes | Project | |
| 18 | Chemistry UG | CHS | 17CHS30 | R.Kuveran | Corrosion Inhibition Of Carbon Steel By Ctab In Simulated Concrete Pore Solution | Project | |
| 19 | Chemistry UG | CHS | 17CHS32 | N.Manonmani | Corrosion inhibition efficiency of L-Leucine Zn2+ system on carbon steel in well water | Project | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20 | Chemistry UG | CHS | 17CHS33 | N.Mariyammal | Synthesis and characterization of indole derived Copper complex | Project | |
| 21 | Chemistry UG | CHS | 17CHS39 | G.Naveen Kumar | Synthesis and characterization of indole derived Copper complex | Project | |
| 22 | Chemistry UG | CHS | 17CHS40 | Ns.Naveensankarapandi | Corrosion inhibition efficiency of L-Leucine Zn2+ system on carbon steel in well water | Project | |
| 23 | Chemistry UG | CHS | 17CHS41 | N.Navinash | Synthesis and spectral studies of Schiff base ligand based metal (Ni, Co, Cu, Zn) Complexes | Project | |
| 24 | Chemistry UG | CHS | 17CHS45 | Pandiyarajan | Synthesis Of Polysulfone - Co - Poly(Vinyl Chloride) | Project | |
| 25 | Chemistry UG | CHS | 17CHS46 | K.Poosathurai | Synthesis and spectral studies of Schiff base ligand based metal (Ni, Co, Cu, Zn) Complexes | Project | |
| 26 | Chemistry UG | CHS | 17CHS52 | R.Rajeshwari | Corrosion Inhibition Of Carbon Steel By Ctab In Simulated Concrete Pore Solution | Project | |
| 27 | Chemistry UG | CHS | 17CHS55 | M.Ranjith | Synthesis and characterization of indole derived Copper complex | Project | |
| 28 | Chemistry UG | CHS | 17CHS57 | G.Sankareshshree | Corrosion Inhibition Of Carbon Steel By Ctab In Simulated Concrete Pore Solution | Project | |
| 29 | Chemistry UG | CHS | 17CHS58 | M.Santhiya | Synthesis and spectral studies of Schiff base ligand based metal (Ni, Co, Cu, Zn) Complexes | Project | |
| 30 | Chemistry UG | CHS | 17CHS59 | C.Santhoshshivan | Corrosion inhibition efficiency of L-Leucine Zn2+ system on carbon steel in well water | Project | |
| 31 | Chemistry UG | CHS | 17CHS61 | Sheryl S Daniel | Synthesis and characterization of indole derived Copper complex | Project | |
| 32 | Chemistry UG | CHS | 17CHS64 | M.Sri Balamanimekalai | Synthesis and characterization of Schiff-base ligand derived from Indole-3-carboxaldehyde and 3,4-Di-aminobenzophenone | Project | |
| 33 | Chemistry UG | CHS | 17CHS66 | N.Surjith | Corrosion Inhibition Of Carbon Steel By Ctab In Simulated Concrete Pore Solution | Project | |
| 34 | Chemistry UG | CHS | 17CHS68 | S.Tharun | Synthesis and characterization of Schiff-base ligand derived from Indole-3-carboxaldehyde and 3,4-Di-aminobenzophenone | Project | |
| 35 | Chemistry UG | CHS | 17CHS69 | Vasanth. O | Synthesis Of Polysulfone - Co - Poly(Vinyl Chloride) | Project | |
| 36 | Chemistry UG | CHS | 17CHS71 | S.Venkadeswari | Corrosion Inhibition Of Carbon Steel By Ctab In Simulated Concrete Pore Solution | Project | |
| 37 | Chemistry UG | CHS | 17CHS75 | D.Karunyashiny | Corrosion inhibition efficiency of L-Leucine Zn2+ system on carbon steel in well water | Project | |
| 38 | Chemistry UG | CHS | 17CHS77 | M.Shanmugaraj | Synthesis and spectral studies of Schiff base ligand based metal (Ni, Co, Cu, Zn) Complexes | Project | |
| 39 | Chemistry UG | CHS | 17CHS78 | M.Shivavarsha | Corrosion inhibition efficiency of L-Leucine Zn2+ system on carbon steel in well water | Project | |

SINCE 1881

# The American College,Madurai

(An Autonomous Institution Affiliated to Madurai Kamaraj University, India)

(Re-accredited(2nd Cycle) by NAAC with Grade A CGPA - 3.46 on a 4 - point scale)

## Continuous Assesment & End Of Semester Marks

**Course Code** : CHS 3534
**Course Title** : Project
**Mark Entered By** : ANGELIN THANGAKANI
**Name of Course Teacher(s)** : ANGELIN THANGAKANI

**Semester** : Even
**Month & Year** : April 2020
**Date of Submission** : 06-06-2020

| Roll No. | Name | Continuous Assessment | | |
|---|---|---|---|---|
| | | L-1 | L-2 | Total |
| | Max.Mark | 75 | 25 | 100 |
| 17CHS01 | M.AAKASH | 65 | 15 | 80 |
| 17CHS02 | M.AJITHKUMAR | A | NA | 0 |
| 17CHS03 | M.AKASH | 67 | 18 | 85 |
| 17CHS04 | V.AMBIKAPATHI | 55 | 10 | 65 |
| 17CHS05 | S.ANJANADEVI | 68 | 22 | 90 |
| 17CHS06 | A.ARUNKUMAR | 57 | 18 | 75 |
| 17CHS07 | N.DEEPARATHNA | 73 | 22 | 95 |
| 17CHS08 | G.DHARANI | 67 | 22 | 89 |
| 17CHS09 | C.P.DHARANI | 61 | 22 | 83 |
| 17CHS10 | S.GAYATHRI | 69 | 20 | 89 |
| 17CHS11 | P.GOWTHAM | 68 | 19 | 87 |
| 17CHS12 | A.GOWTHAM | 70 | 19 | 89 |
| 17CHS13 | M.HARIHARAN | 50 | A | 50 |
| 17CHS15 | K.ILAMARAN | 50 | A | 50 |
| 17CHS17 | K.JEBARSON RASU | 70 | 18 | 88 |
| 17CHS18 | G.JEEVA PRIYA DHARSHINI | 62 | 22 | 84 |
| 17CHS19 | R.JEYABHARATHI | 73 | 22 | 95 |
| 17CHS20 | K.JEYASRI | 68 | 15 | 83 |
| 17CHS21 | P.KAMALI | 73 | 23 | 96 |
| 17CHS23 | M J.KARTHIKA | 73 | 22 | 95 |

**Signature of the Course Teacher(s)**

**Signature of Internal(s)**----------

**Date :** ----------

**Name & Signature of External**----------

---

**Signature of Head of the Department**

# The American College,Madurai

(An Autonomous Institution Affiliated to Madurai Kamaraj University, India)

(Re-accredited(2nd Cycle) by NAAC with Grade A CGPA - 3.46 on a 4 - point scale)

SINCE 1881

## Continuous Assesment & End Of Semester Marks

**Course Code** : CHS 3534 **Semester** : Even

**Course Title** : Project **Month & Year** : April 2020

**Mark Entered By** : ANGELIN THANGAKANI **Date of Submission** : 06-06-2020

**Name of Course Teacher(s)** : ANGELIN THANGAKANI

| Roll No. | Name | Continuous Assessment | | |
|---|---|---|---|---|
| | | L-1 | L-2 | Total |
| | Max.Mark | 75 | 25 | 100 |
| 17CHS24 | R.KARTHIKEYAN | 72 | 24 | 96 |
| 17CHS26 | M.KAVITHA | 71 | 22 | 93 |
| 17CHS27 | R.KIRUTHIGAA DEVI | 68 | 18 | 86 |
| 17CHS28 | S.KIRUTHIKA | 73 | 23 | 96 |
| 17CHS29 | M.KULANDAI VELU | 70 | 21 | 91 |
| 17CHS30 | R.KUVERAN | 58 | 22 | 80 |
| 17CHS31 | R.MADHUMITHA | A | NA | 0 |
| 17CHS32 | N.MANONMANI | 72 | 23 | 95 |
| 17CHS33 | N.MARIYAMMAL | 72 | 22 | 94 |
| 17CHS34 | S.MARUTHUPANDI | A | NA | 0 |
| 17CHS35 | P.MATHU MEENA | 63 | 24 | 87 |
| 17CHS36 | S.MOHAMED SULAIMAN | 64 | 15 | 79 |
| 17CHS37 | E.MONIZA | 69 | 22 | 91 |
| 17CHS38 | A.NANCY | 70 | 23 | 93 |
| 17CHS39 | G.NAVEEN KUMAR | 70 | 21 | 91 |
| 17CHS40 | NS.NAVEENSANKARAPANDI | 73 | 22 | 95 |
| 17CHS41 | N.NAVINASH | 68 | 15 | 83 |
| 17CHS43 | P.PALAVESA ARAVIND | 62 | 20 | 82 |
| 17CHS44 | J.PANDIYARAJAN | 60 | 19 | 79 |
| 17CHS45 | M.PERIYANDAVAN | 50 | 13 | 63 |

**Signature of the Course Teacher(s)**

**Signature of Internal(s)**----------

**Date :** ----------

**Name & Signature of External**----------

---

**Signature of Head of the Department**

**Signature of Head of the Department**----------

SINCE 1881

# The American College,Madurai

(An Autonomous Institution Affiliated to Madurai Kamaraj University, India)

(Re-accredited(2nd Cycle) by NAAC with Grade A CGPA - 3.46 on a 4 - point scale)

## Continuous Assesment & End Of Semester Marks

**Course Code** : CHS 3534 **Semester** : Even

**Course Title** : Project **Month & Year** : April 2020

**Mark Entered By** : ANGELIN THANGAKANI **Date of Submission** : 06-06-2020

**Name of Course Teacher(s)** : ANGELIN THANGAKANI

| Roll No. | Name | Continuous Assessment | | |
|---|---|---|---|---|
| | | L-1 | L-2 | Total |
| | Max.Mark | 75 | 25 | 100 |
| 17CHS46 | K.POOSATHURAI | 45 | 17 | 62 |
| 17CHS47 | B.K.PRABHAVATHI | 69 | 17 | 86 |
| 17CHS48 | J.PRASANNA KUMAR | 71 | 21 | 92 |
| 17CHS49 | P.PRAVEEN | 70 | 18 | 88 |
| 17CHS50 | G.PUGAZHENTHI KANNAN | 67 | 18 | 85 |
| 17CHS51 | P.PUNITHA | A | NA | 0 |
| 17CHS52 | R.RAJESHWARI | 60 | 18 | 78 |
| 17CHS53 | D.RAKSHANA | 70 | 19 | 89 |
| 17CHS54 | P.RAMAMOORTHY | 70 | 19 | 89 |
| 17CHS55 | M.RANJITH | 70 | 22 | 92 |
| 17CHS56 | M.RENUGA DEVI | 70 | 22 | 92 |
| 17CHS57 | G.SANKARESHSHREE | 70 | 22 | 92 |
| 17CHS58 | M.SANTHIYA | 65 | 15 | 80 |
| 17CHS59 | C.SANTHOSHSHIVAN | 62 | 23 | 85 |
| 17CHS60 | V.SATHISH | 69 | 16 | 85 |
| 17CHS61 | SHERYL S DANIEL | 73 | 23 | 96 |
| 17CHS62 | A.SHOBIKA | 70 | 19 | 89 |
| 17CHS63 | R.SOBANA | 70 | 21 | 91 |
| 17CHS64 | M.SRI BALAMANIMEKALAI | 70 | 21 | 91 |
| 17CHS65 | J.SRIDEVI | 70 | 20 | 90 |

**Signature of the Course Teacher(s)**

**Signature of Internal(s)**----------

**Date :** ----------

**Name & Signature of External**----------

---

C.A. Thanks

**Signature of Head of the Department**

**Signature of Head of the Department**----------

SINCE 1881

# The American College,Madurai

(An Autonomous Institution Affiliated to Madurai Kamaraj University, India)

(Re-accredited(2nd Cycle) by NAAC with Grade A CGPA - 3.46 on a 4 - point scale)

## Continuous Assesment & End Of Semester Marks

**Course Code** : CHS 3534
**Course Title** : Project
**Mark Entered By** : ANGELIN THANGAKANI
**Name of Course Teacher(s)** : ANGELIN THANGAKANI

**Semester** : Even
**Month & Year** : April 2020
**Date of Submission** : 06-06-2020

| Roll No. | Name | Continuous Assessment | | |
|---|---|---|---|---|
| | | L-1 | L-2 | Total |
| | Max.Mark | 75 | 25 | 100 |
| 17CHS66 | N.SURJITH | 70 | 22 | 92 |
| 17CHS67 | M.THANGAVELU | 60 | 22 | 82 |
| 17CHS68 | S.THARUN | 71 | 22 | 93 |
| 17CHS69 | O.VASANTH | 65 | 18 | 83 |
| 17CHS70 | K.VASANTH | 69 | 20 | 89 |
| 17CHS71 | S.VENKADESWARI | 60 | 17 | 77 |
| 17CHS72 | K.VIGNESH KUMAR | 35 | NA | 35 |
| 17CHS73 | J.VISWA | 69 | 17 | 86 |
| 17CHS74 | A.YOGHA | 68 | 22 | 90 |
| 17CHS75 | D.KARUNYA SHINY | 70 | 21 | 91 |
| 17CHS76 | M.VIGNESHWARAN | 70 | 22 | 92 |
| 17CHS77 | M.SHANMUGARAJ | 47 | 11 | 58 |
| 17CHS78 | M.SHIVA VARSHA | 70 | 22 | 92 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Signature of the Course Teacher(s)

Signature of Internal(s)----------

Date : ----------

Name & Signature of External----------

---

C.D. Mary

Signature of Head of the Department

Signature of Head of the Department----------

# A STUDY ON MARKETING OF SPORTS GOODS AND WEARS IN MADURAI CITY

A Project Report Submitted in partial fulfillment of the requirement for the award of the degree of

**BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY**


**Submitted by**

| | |
|---|---|
| **SURYA A. PANDIAN** | **(17CIT01)** |
| **V.AJAY** | **(17CIT05)** |
| **A.DHANUSH** | **(17CIT20)** |
| **M.MEGANATHAN** | **(17CIT36)** |
| **R.SUDHARSAN** | **(17CIT66)** |
| **R.SOWMYAN** | **(17CIT75)** |

**Under the Guidance of**

**Mr.A.SAMUEL RAJ, M.COM., M.Phil., NET, B.C.S.,**






## THE AMERICAN COLLEGE

**An Autonomous Institution affiliated to Madurai Kamaraj University**

**(Re-accredited (2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)**

**Madurai 625002**


**APRIL 2020**

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Mr.A.SAMUEL RAJ, M.COM., M.Phil., NET, B.C.S.,
ASSISTANT PROFESSOR,
DEPARTMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI-625 002

## CERTIFICATE

This is to certify that the research project entitled, "A STUDY ON MARKETING OF SPORTS GOODS AND WEARS IN MADURAI CITY", done by SURYA A. PANDIAN (17CIT01), V.AJAY (17CIT05), A.DHANUSH (17CIT20), M.MEGANATHAN (17CIT36), R.SUDHARSAN (17CIT66), R.SOWMYAN (17CIT75) under my guidance in partial fulfillment of the award of degree of Commerce with Information Technology and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

**Mr. A. SAMUEL RAJ,** M.Com., M.Phil., NET, B.C.S.,

PLACE: MADURAI

DATE: 05/10/2020

COUNTERSINGED BY

**(Dr.C.Antony Mary Vinothini, M.Com., M. Phil., M.B.A., Ph.D.,)**
**Coordinator, Department of Commerce (IT)**

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| | |
|---|---|
| **SURYA A. PANDIAN** | **(17CIT01)** |
| **V.AJAY** | **(17CIT05)** |
| **A.DHANUSH** | **(17CIT20)** |
| **M.MEGANATHAN** | **(17CIT36)** |
| **R.SUDHARSAN** | **(17CIT66)** |
| **R.SOWMYAN** | **(17CIT75)** |

## DECLARATION

This is to certify that this project entailed **"A STUDY ON MARKETING OF SPORTS GOODS AND WEARS IN MADURAI CITY"**, is the original work done by **SURYA A. PANDIAN (17CIT01), V.AJAY (17CIT05), A.DHANUSH (17CIT20), M.MEGANATHAN (17CIT36), R.SUDHARSAN (17CIT66), R.SOWMYAN (17CIT75)** of The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with Information Technology and that the project work had not previously formed the basis for the award of any Degree, Diploma, Fellowship or any other similar title.

**Signature of the Researchers**

**SURYA A. PANDIAN** **(17CIT01)**

**V.AJAY** V-AJAY **(17CIT05)**

**A.DHANUSH** **(17CIT20)**

**M.MEGANATHAN** **(17CIT36)**

**R.SUDHARSAN** **(17CIT66)**

**R.SOWMYAN** **(17CIT75)**

**Signature of the Guide**

**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**

**PLACE: MADURAI**

**DATE:** 05/10/2020

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# A STUDY ON CONSUMERS BUYING BEHAVIOUR TOWARDS ONLINE SHOPPING IN MADURAI CITY:

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the Award of the Degree

**BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY**


**Submitted by**

| | |
|---|---|
| P.ADHI NARAYANAN | (17CIT02) |
| S .ARAVINDH SHRI NATH | (17CIT10) |
| G .BALAJI | (17CIT15) |
| K .HARI PRASATH | (17CIT28) |
| K .MADHAN | (17CIT34) |
| R.NAVA SAKTHI | (17CIT44) |

**Under the Guidance of**

**MR.SAMUEL RAJ ,M.COM.,M.Phil.,NET,B.C.S.,**






**THE AMERICAN COLLEGE**

**An Autonomous Institution affiliated to Madurai Kamaraj University)**

**(Re-accredited (2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale**

**Madurai 625002**




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MR. SAMUEL RAJ .,M.COM.,M.Phil.,NET.,B.C.S.,

ASSISTANT PROFESSOR,

DEPARTMENT OF COMMERCE,

THE AMERICAN COLLEGE,

MADURAI-625 002.

## CERTIFICATE

This is to certify that the research project entitled, ''A STUDY ON CONSUMERS BUYING BEHAVIOUR TOWARDS ONLINE SHOPPING IN MADURAI CITY''. done by P.ADHI NARAYANAN (17CIT02), S.ARAVINDH SHRI NATH (17CIT10), G.BALAJI(17CIT15), K.HAIR PRASATH (17CIT28), K.MADHAN (17CIT34). under my guidance in partial fulfillment of the award of degree of Commerce with Information Technology and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET., B.C.S..

Place: Madurai

DATE: 05/10/2020

COUNTERSINGED BY

(Dr.C.Antony Mary Vinothini, M.Com., M. Phil., M.B.A., Ph.D.,)
Coordinator, Department of Commerce (IT)



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| | |
|---|---|
| P.ADHI NARAYANAN | ( 17CIT02) |
| S .ARAVINDH SHRI NATH | (17CIT10) |
| G .BALAJI | (17CIT15) |
| K .HARI PRASATH | (17CIT28) |
| K .MADHAN | (17CIT34) |
| R.NAVA SAKTHI | (17CIT44) |

## DECLARATION

**This is to certify that the research project entitled, ''A STUDY ON CONSUMERS BUYING BEHAVIOUR TOWARDS ONLINE SHOPPING IN MADURAI CITY''.** done by **P.ADHI NARAYANAN (17CIT02),S.ARAVINDH SHRI NATH (17CIT10), G.BALAJI(17CIT15), K.HAIR PRASATH (17CIT28), K.MADHAN (17CIT34)** of The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with Information Technology and that the project work had not previously formed the basis for the award of any Degree, Diploma, Fellowship or any other similar title.

**Signature of the Researchers**

| | |
|---|---|
| P.ADHI NARAYANAN | ( 17CIT02) |
| S .ARAVINDH SHRI NATH | (17CIT10) |
| G .BALAJI | (17CIT15) |
| K .HARI PRASATH | (17CIT28) |
| K .MADHAN | (17CIT34) |
| R.NAVA SAKTHI | (17CIT44) |

**Signature of the Guide**

**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.**

**PLACE: MADURAI**

**DATE:** 05/10/2020



Scanned with CamScanner

A Project Report Submitted to the

Madurai Kamaraj University

In Partial Fulfilment for the Award of the Degree

BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY

(2017-2020)

Submitted by

| | |
|---|---|
| S.AISHWARYA | (17CIT03) |
| M.DURGALAKSHMI | (17CIT23) |
| T.HEPZIBAN GNANA JUDUTH | (17CIT32) |
| R.SAKTHI PRIYA DHARSHINI | (17CIT53) |
| R.S.SANGEETHA | (17CIT54) |
| R.SNEKA | (17CIT64) |

Under the Guidance of
Ms. E.keren judi, Mcom(CA), M.phil

# THE AMERICAN COLLEGE

An Autonomous Institution affiliated to Madurai Kamaraj University)

(Re-accredited(2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)

Madurai 625002

Ms. E.keren judi,
Lecturer Department of Commerce,
The American college,
Madurai-625 002

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# CERTIFICATE

This is to certify that the research project entitled, "A STUDY ON CUSTOMER'S PREFERENCE TOWARDS THE IMITATION JEWELLARY ", is a Bonafide software done by S.AISHWARYA (17CIT03), M.DURGALAKSHMI (17CIT23), T.HEPZIBAH GNANAJUDITH (17CIT32), R.SAKTHIPRIYADHARSHINI (17CIT53), R.S.SANGEETHA (17CIT54), R.SNEKA (17CIT64) under my guidance in partial fulfillment of the award of degree of Commerce with Information Technology and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Coordinator of the Department

(Dr. C. Antony Mary Vinothini)

Signature of the guide

(Ms. E.keren judi,)

PLACE: Madurai
DATE : 20-08-2020

Scanned with CamScanner

## DECLARATION

We hereby declare that this project was carried out by us under the guidance of Ms. E.keren judi, Department of Commerce, The American College, Madurai.

We also declare that this project report is the result of our own effort and that it has not copied from any one and has not been submitted by anybody in anywhere.

Place:Madurai
Date: 20-08-2020

S.AISHWARYA
17CIT03

M.DURGALAKSHMI
17CIT23

T.HEPZIBAN GNANA JUDUTH
17CIT37

R.SAKTHI PRIYA DHARSHINI
17CIT53

R.S.SANGEETHA
17CIT54

R.SNEKA
17CIT64

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# A STUDY ON CUSTOMERS SATISFACTION TOWARDS FLIPKART IN MADURAI CITY

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the Award of the Degree

**BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY**

**(2017-2020)**

**Submitted by**


| | |
|---|---|
| A.AKASH | (17CIT07) |
| S.ARJUN | (17CIT12) |
| N.DHINESH KUMAR | (17CIT21) |
| V.GABRIEL VINCENT | (17CIT24) |
| S.HARISH KUMAR | (17CIT31) |
| R.NIRMAL RAJ | (17CIT45) |


**Under the Guidance of**

**Dr. C. ANTONY MARY VINOTHINI, M.Com., M.Phil., M.B.A., Ph.D.**

**BACHELOR OF COMMERCE (IT)**

## THE AMERICAN COLLEGE

**An Autonomous Institution affiliated to Madurai Kamaraj University**

**(Re-accredited (2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)**

**Madurai 625002**

Scanned with CamScanner

**Dr. C. ANTONY MARY VINOTHINI, M.Com., M.Phil., M.B.A., Ph.D.**

Head of the Department,

Department of commerce,

The American College,

Madurai- 625002

## CERTIFICATE

This is to certify that this project entailed **"A STUDY ON CUSTOMERS SATISFACTION TOWARDS FLIPKART IN MADURAI CITY"**, is the original work done by **A.AKASH (17CIT07), S.ARJUN (17CIT12), N.DHINESH KUMAR (17CIT21), V.GABRIEL VINCENT (17CIT24), S.HARISH KUMAR (17CIT31), R.NIRMAL RAJ (17CIT45)**.The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with Information Technology and that the project work had not previously formed the basis for the award of any Degree, Diploma, Fellowship or any other similar title.

**Place: Madurai**

**Date:** 5.10.2020

C. Antony Mary Vinothini

**COORDINATOR OF THE DEPARTMENT**

**(Dr. C. ANTONY MARY VINOTHINI)**

C. Antony Mary Vinothini

**FACULTY GUIDE**

**(Dr. C. ANTONY MARY VINOTHINI)**

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## DECLARATION

We hereby declare that this project was carried out by us under the guidance of **Dr. C. ANTONY MARY VINOTHINI, M.Com., M.Phil., M.B.A., Ph.D.** Department of commerce with Information Technology, The American College, Madurai.

We also declare that this project report is the result of our own effort and that it has not copied from any one and has not been submitted by anybody in anywhere.

**Place: Madurai**

**Date:** 5.10.2020

**A.AKASH**

**(17CIT07)**

**S.ARJUN**

**(17CIT12)**

**N.DHINESH KUMAR**

**(17CIT21)**

**V.GABRIEL VINCENT**

**(17CIT24)**

**S.HARISH KUMAR**

**(17CIT31)**

**R.NIRMAL RAJ**

**(17CIT45)**

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# STUDENT ID CARD WITH BARCODE GENERATION

A Project Report Submitted to the

Madurai Kamaraj University

In Partial Fulfilment for the Award of the Degree

BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY

(2017-2020)

Submitted by


| | |
|---|---|
| R.ARAVIND | (17CIT08) |
| R.ASEEM HAMEED | (17CIT14) |
| S.HARI KRISHNA | (17CIT26) |
| M.MOHAMED RIAZ | (17CIT37) |
| S.MUGILAN | (17CIT39) |


Under the Guidance of

Ms. P. LUNA JEBASRI, M.Sc (IT)





## THE AMERICAN COLLEGE

An Autonomous Institution affiliated to Madurai Kamaraj University)

(Re-accredited(2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)

Madurai 625002


Scanned with CamScanner

Ms. P. LUNA JEBASRI, M.Sc (IT)

Lecturer Department of Computer Application,

The American college,

Madurai-625 002

# CERTIFICATE

This is to certify that the research project entitled, "STUDENT ID CARD WITH BARCODE GENERATION", is a Bonafide software done by R.ARAVIND (17CIT08), R.ASSEM HAMEED (17CIT14), R.HARI KRISHNA(17CIT26), M.MOHAMED RIAZ(17CIT37), S.MUGILAN (17CIT39) under my guidance in partial fulfillment of the award of degree of Commerce with Information Technology and that no part of the project has been submitted before for the award of any degree, diploma,fellowship or any other title.

Coordinator of the Department

(Ms.C.Antony Mary Vinothini , M.Com, M.Phil, Ph.D)

Faculty guide

(Ms. P.Luna Jebasri, M.Sc (IT))

PLACE: Madurai

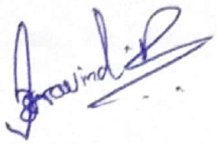
DATE: 5/10/2020

Scanned with CamScanner

## DECLARATION

We hereby declare that this project was carried out by us under the guidance of Ms. P.Luna Jebasri, M.Sc (IT) Department of Computer Application, The American College, Madurai.

We also declare that this project report is the result of our own effort and that it has not copied from any one and has not been submitted by anybody in anywhere.



R.ARAVIND

17CIT08

R.ASSEM HAMEED

17CIT14

R.HARI KRISHNA

17CIT26

M.MOHAMED RIAZ

17CIT37

S.MUGILAN

17CIT39

Place: Madurai

Date: 5/10/20

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# TECH SUPPORT SYSTEM

A Project Report Submitted to the

Madurai Kamaraj University

In Partial Fulfilment for the Award of the Degree

**BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY**

(2017-2020)

Submitted by


| | |
|---|---|
| Y. ARAVIND RAJKUMAR | (17CIT09) |
| S. DHANAKALI RAJAN | (17CIT19) |
| S. HARI KRISHNAN | (17CIT27) |
| A. MOHAMMED AMEEN | (17CIT38) |
| G. MURALEKKRISHNA | (17CIT40) |


Under the Guidance of

**Mr. M. Martin Porus, M.Sc., PGDCA.**


## THE AMERICAN COLLEGE

An Autonomous Institution affiliated to Madurai Kamaraj University

(Re-accredited (2nd cycle) by NAAC with Grade "A"CGPA-3.46 on a 4-point scale)

Madurai-625 002


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## CERTIFICATE

This is to certify that the research project entitled, "**Tech Support System**", is a bonafide software done by, Y. ARAVIND RAJKUMAR (17CIT09), S. DHANAKALI RAJAN (17CIT19), S. HARI KRISHNAN(17CIT27), A. MOHAMMED AMEEN(17CIT38), G. MURALEKKRISHNA(17CIT40), under my guidance in partial fulfilment of the award of Bachelor's degree of commerce with Information Technology and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Coordinator of the Department
(Dr. C. Antony Mary Vinothini)

Faculty guide
(Mr. Martin Porus)

PLACE: Madurai

DATE:

Scanned with CamScanner

## DECLARATION

We hereby declare that this project was carried out by us under the guidance of **Mr. MARTIN PORUS, M.Sc., PGDCA.,** Department of Computer Application, The American College, Madurai.

We also declare that this project report is the result of our on effort and that it has not been copied from any one and has not been submitted by anybody is anywhere.

Place: Madurai
Date: 05/10/2020.

Y. ARAVIND RAJKUMAR
(17CIT09)

S. DHANAKALI RAJAN
(17CIT19)

S. HARI KRISHNAN
(17CIT27)

A. MOHAMMED AMEEN
(17CIT38)

G. MURALEKKRISHNA
(17CIT40)

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# A STUDY ON CONSUMERS SATISFACTION TOWARDS HIMALAYAN PRODUCTS IN MADURAI CITY

A Project Report Submitted in partial fulfillment of the requirement for the award of the degree of

**BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY**

**Submitted by**


| | |
|---|---|
| **A.ARAVINDH** | **(17CIT11)** |
| **B.HARI PRASAAD** | **(17CIT30)** |
| **S.KARTHIKEYAN** | **(17CIT33)** |
| **G.RAHUL** | **(17CIT48)** |
| **C.RAMANUJAM** | **(17CIT50)** |
| **G.SANTHOSH KUMAR** | **(17CIT56)** |


**Under the Guidance of**

**Mr.A.SAMUEL RAJ, M.COM., M.Phil., NET, B.C.S.,**


## THE AMERICAN COLLEGE

**An Autonomous Institution affiliated to Madurai Kamaraj University)**

**(Re-accredited (2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)**

**Madurai 625002**




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Mr.A.SAMUEL RAJ, M.COM., M.Phil., NET, B.C.S.,

ASSISTANT PROFESSOR,

DEPARTMENT OF COMMERCE,

THE AMERICAN COLLEGE,

MADURAI-625 002

## CERTIFICATE

This is to certify that the research project entitled, **"A STUDY ON CONSUMERS SATISFACTION TOWARDS HIMALAYAN PRODUCTS IN MADURAI CITY"**, done by **A.ARAVINDH(17CIT11), B.HARIPRASAAD(17CIT30), S.KARTHIKEYAN (17CIT33), G.RAHUL (17CIT48), C.RAMANUJAM (17CIT50), G.SANTHOSHKUMAR (17CIT56),** under my guidance in partial fulfillment of the award of degree of Commerce with Information Technology and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**

PLACE: MADURAI

DATE: 05/10/2020

COUNTERSINGED BY

**(Dr.C.Antony Mary Vinothini, M.Com., M. Phil., M.B.A., Ph.D.,)**
**Coordinator, Department of Commerce (IT)**



Scanned with CamScanner

| | |
|---|---|
| **A.ARAVINDH** | **(17CIT11)** |
| **B.HARI PRASAAD** | **(17CIT30)** |
| **S.KARTHIKEYAN** | **(17CIT33)** |
| **G.RAHUL** | **(17CIT48)** |
| **C.RAMANUJAM** | **(17CIT50)** |
| **G.SANTHOSH KUMAR** | **(17CIT56)** |

## DECLARATION

This is to certify that this project entailed **"A STUDY ON CONSUMERS SATISFACTION TOWARDS HIMALAYAN PRODUCTS IN MADURAI CITY"**, is the original work done by **A.ARAVINDH (17CIT11) B.HARI PRASAAD (17CIT30) S.KARTHIKEYAN (17CIT33), G.RAHUL (17CIT48),C.RAMANUJAM (17CIT50), G.SANTHOSHKUMAR (17CIT56),** of The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with Information Technology and that the project work had not previously formed the basis for the award of any Degree, Diploma, Fellowship or any other similar title.

**Signature of the Researchers**

| | |
|---|---|
| **A.ARAVINDH** | **(17CIT11)** |
| **B.HARI PRASAAD** | **(17CIT30)** |
| **S.KARTHIKEYAN** | **(17CIT33)** |
| **G.RAHUL** | **(17CIT48)** |
| **C.RAMANUJAM** | **(17CIT50)** |
| **G.SANTHOSH KUMAR** | **(17CIT56)** |

**Signature of the Guide**

**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**
**PLACE: MADURAI**
**DATE:** 05/10/2020



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# A Study on Customer Satisfaction towards TOYOTA CARS in Madurai city

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the Award of the Degree of

**BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY**


**Submitted by**

| | |
|---|---|
| **M.DEVI PRAKASH** | **(17CIT18)** |
| **K.NANTHA GOPAL** | **(17CIT43)** |
| **D.G.PRANAV AMARNATH** | **(17CIT46)** |
| **C.RAKESH** | **(17CIT49)** |
| **S.SABARI VASAN** | **(17CIT52)** |
| **Z.SHAHID AFIRIDI** | **(17CIT58)** |

**Under the Guidance of**

**Mr. A .SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**


**BACHELOR OF COMMERCE (IT)**

## THE AMERICAN COLLEGE

**An Autonomous Institution affiliated to Madurai Kamaraj University)**

**(Re-accredited (2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)**

**Madurai 625002**

**APRIL 2020**



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**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**

**ASSISTANT PROFESSOR,**

**DEPARTMENT OF COMMERCE,**

**THE AMERICAN COLLEGE,**

**MADURAI- 625002**

## CERTIFICATE

This is to certify that this project entailed **"A Study on Customer Satisfaction towards Solamalai Automobiles in Madurai city"**, is the original work done by **M.DEVI PRAKASH (17CIT18),K.NANTHA GOPAL (17CIT43), D.G.PRANAV AMARNATH (17CIT46),C.RAKESH (17CIT49),S.SABARI VASAN (17CIT52),Z.SHAHID AFIRIDI (17CIT58)** of The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce withInformation Technology and that the project work had not previously formed the basis for the award of any Degree, Diploma, Fellowship or any other similar title.

**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**

PLACE: MADURAI

DATE: 05/10/2020.

COUNTERSINGED BY

**(Dr.C.Antony Mary Vinothini, M.Com., M. Phil., M.B.A., Ph.D.,)**
**Coordinator, Department of Commerce (IT)**



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M.DEVI PRAKASH (17CIT18)
K.NANTHA GOPAL (17CIT43)
D.G.PRANAV AMARNATH (17CIT46)
C.RAKESH (17CIT49)
S.SABARI VASAN (17CIT52)
Z.SHAHID AFIRIDI (17CIT58)
DEPARTMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI - 625002

## DECLARATION BY THE RESEARCHERS

I hereby declare that the project titled **"A Study on Customer Satisfaction towards Solamalai Automobiles in Madurai city"** submitted for the degree of Bachelor of Commerce with Information Technology is my original work and no part of the project has been submitted for the award of any degree, diploma, fellowship or other similar titles.

Signature of the Researchers

M.DEVI PRAKASH (17CIT18)

K.NANTHA GOPAL (17CIT43)

D.G.PRANAV AMARNATH (17CIT46)

C.RAKESH (17CIT49)

S.SABARI VASAN (17CIT52)

Z.SHAHID AFIRIDI (17CIT58)

**Signature of the Guide**

**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**

**PLACE: MADURAI**
**DATE:** 05/10/2020.



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# JEWELLERY SHOP BILLING SYSTEM

A Project Report Submitted to the

Madurai Kamaraj University

In Partial Fulfilment for the Award of the Degree

BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY

(2017-2020)

Submitted by


| | |
|---|---|
| N.GAYATHRI | (17CIT25) |
| S.MARIYA PRATHIBA | (17CIT35) |
| R.NANDHINI | (17CIT41) |
| C.NANDHINI | (17CIT42) |
| C.DIVYA | (15CIT12) |


Under the Guidance of

Ms. P. LUNA JEBASRI M.Sc.IT.,





## THE AMERICAN COLLEGE

An Autonomous Institution affiliated to Madurai Kamaraj University)

(Re-accredited(2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)

Madurai-625002


Scanned with CamScanner

Ms. P. LUNA JEBASRI M.Sc.IT

Lecturer Department of Computer Application,The American college,Madurai-625 002

# CERTIFICATE

This is to certify that the research project entitled, **"JEWELLERY SHOP BILLING SYSTEM"**, is a bonafide work done by **N.GAYATHRI(17CIT25), S.MARIYAPRATHIBA(17CIT35), R.NANDHINI (17CIT41), C.NANDHINI(17CIT42), C.DIVYA(15CIT12)** in partial fulfillment for the award of the **degree Bachelor of Commerce with Information Technology of The American College** for the academic year 2017-2020 and that no part of the project has been submitted before for the award of any degree, diploma,fellowship or any other title.

**Coordinator of the Department** **Faculty guide**

**(Ms.C.Antony MaryVinothini**

**M.COM., M.Phil., (Ph.D).,)** **(Ms. P.Luna Jebasri M.Sc.IT.,)**

**PLACE:Madurai**

**DATE:** 05/10/2020

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## DECLARATION

We hereby declare that this project was carried out by us under the guidance of **Ms. P.Luna Jebasri M.Sc.IT., Department of Computer Application, The American College,Madurai.**

We also declare that this project report is the result of our own effort and that it has not copied from any one and has not been submitted by anybody in anywhere.

Place:Madurai

Date: 05/10/2020

N.GAYATHRI

(17CIT25)

S.MARIYA PRATHIBA

(17CIT35)

R.NANDHINI

(17CIT41)

C.NANDHINI

(17CIT42)

C.DIVYA

(15CIT12)

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# A STUDY ON CONSUMER PREFERENCE TOWARDS ONLINE FOOD DELIVERY IN MADURAI CITY

A Project Report Submitted in partial fulfillment of the requirement for the award of the degree of

**BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY**


**Submitted by**

| | |
|---|---|
| **S.HARIHARAN** | **(17CIT29)** |
| **N.SARUHASAN** | **(17CIT57)** |
| **R.SREERAM** | **(17CIT65)** |
| **M.SURYA** | **(17CIT68)** |
| **M.VIGNESH RAJA** | **(17CIT71)** |
| **P.VISHNU** | **(17CIT74)** |

**Under the Guidance of**

**Mr.A.SAMUEL RAJ, M.COM., M.Phil., NET, B.C.S.,**






## THE AMERICAN COLLEGE

**An Autonomous Institution affiliated to Madurai Kamaraj University)**

**(Re-accredited (2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)**

**Madurai 625002**


**APRIL 2020**



Scanned with CamScanner

Mr.A.SAMUEL RAJ, M.COM., M.Phil., NET, B.C.S.,

ASSISTANT PROFESSOR,

DEPARTMENT OF COMMERCE,

THE AMERICAN COLLEGE,

MADURAI-625 002

# CERTIFICATE

This is to certify that the research project entitled, "A STUDY ON CONSUMER PREFERENCE TOWARDS ONLINE FOOD DELIVERY IN MADURAI CITY" is a project done by S.HARIHARAN(17CIT29),N.SARUHASAN(17CIT57), R.SREERAM(17CIT65),M.SURYA(17CIT68),M.VIGNESH RAJA(17CIT71), P.VISHNU(17CIT74) under my guidance in partial fulfillment of the award of degree of Commerce with Information Technology and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**

PLACE: MADURAI

DATE: 05/10/2020

COUNTERSINGED BY

**(Dr.C.Antony Mary Vinothini, M.Com., M. Phil., M.B.A., Ph.D.,)**
**Coordinator, Department of Commerce (IT)**

Scanned with CamScanner

| | |
|---|---|
| **S.HARIHARAN** | **(17CIT29)** |
| **N.SARUHASAN** | **(17CIT57)** |
| **R.SREERAM** | **(17CIT65)** |
| **M.SURYA** | **(17CIT68)** |
| **M.VIGNESH RAJA** | **(17CIT71)** |
| **P.VISHNU** | **(17CIT74)** |

## DECLARATION

This is to certify that this project entailed **"A STUDY ON MARKETING OF SPORTS GOODS AND WEARS IN MADURAI CITY"**, is the original work done by **SURYA A. PANDIAN (17CIT01), V.AJAY (17CIT05), A.DHANUSH (17CIT20), M.MAEGANADHAN (17CIT36), R.SUDHARSHAN (17CIT66), R.SOWMYAN (17CIT75)** of The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with Information Technology and that the project work had not previously formed the basis for the award of any Degree, Diploma, Fellowship or any other similar title.

**Signature of the Researchers**

| | | |
|---|---|---|
| S. Hari | **S.HARIHARAN** | **(17CIT29)** |
| N. Saru | **N.SARUHASAN** | **(17CIT57)** |
| Roy | **R.SREERAM** | **(17CIT65)** |
| M. Surya | **M.SURYA** | **(17CIT68)** |
| M Vignesh Raja | **M.VIGNESH RAJA** | **(17CIT71)** |
| P. Vishnu | **P .VISHNU** | **(17CIT74)** |

**Signature of the Guide**

**Mr. A. SAMUEL RAJ, M.Com., M.Phil., NET, B.C.S.,**

**PLACE: MADURAI**
**DATE:** 05/10/2020



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# ONLINE BILLING SYSTEM

A Project Report Submitted to the

Madurai Kamaraj University

In Partial Fulfillment for the Award of the Degree

**BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY**

(2017-2020)

Submitted by

R. SHEEBA (17CIT60)

V.PRIYANKA (17CIT47)

S.BHARATHI(17CIT16)

R.RAMYA(17CIT51)

A.SNEHA(17CIT63)

Under the Guidance of

Mrs. G. Pauline Pershyl., M.Sc, B.Ed.,




## THE AMERICAN COLLEGE

An Autonomous Institution affiliated to Madurai Kamaraj University

(Re-accredited (2nd cycle) by NAAC with Grade "A" CGPA-3.46 on a 4-point scale)

Madurai-625 002.

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# "A STUDY ON CUSTOMER SATISFACTION TOWARDS ADIDAS PRODUCT IN MADURAI CITY WITH SPECIAL REFERENCE OF COLLEGE STUDENTS"

A Project Report Submitted to the Madurai Kamaraj University

In Partial Fulfilment for the Award of the Degree

BACHELOR OF COMMERCE WITH INFORMATION TECHNOLOGY

**(2017-2020)**

**Submitted by**


| | |
|---|---|
| **S.SHYAM PRASATH SINGH** | **(17CIT61)** |
| **M.SIVA RAM** | **(17CIT62)** |
| **R.VELAVAN** | **(17CIT69)** |
| **J.G.VENKATESH** | **(17CIT70)** |
| **M.C.VIJAY** | **(17CIT72)** |
| **R.VIJAYPRAKASH** | **(17CIT73)** |

Under the Guidance of DR. P.MANGAYARKARASI., M.com. M.Phil., PhD,


## THE AMERICAN COLLEGE

An Autonomous Institution affiliated to Madurai Kamaraj University)

(Re-accredited (2nd cycle) by NAAC with Grade"A"CGPA-3.46 on a 4 Point scale)
Madurai 625002



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Dr. P.MANGAYARKARASI.,

M.com. M.Phil., PhD

Assistance professors Department of Commerce,

The American college,

Madurai-625 002

# CERTIFICATE

This is to certify that the research project entitled,
**"STUDY OF CUSTOMER SATISFACTION TOWARDS ADIDAS PRODUCT IN MADURAI CITY WITH SPECIAL REFERENCE OF COLLEGE STUDENT",** done by S.SHYAM PRASATH SINGH(17CIT61),M.SIVARAM(17CIT62),R.VELAVAN(17CIT69),J.G.VENKATESH (17CIT70), M.C.VIJAY(17CIT72),R.VIJAYAPRAKASH(17CIT73), under my guidance in partial fulfillment of the award of degree of Commerce with Information Technology and that no part of the project has been submitted before for the award of any degree, diploma ,fellowship or any other title.

C. Antony Mary Vinothini

Coordinator of the Department

(Ms. C. Antony Mary Vinothini)
M.com. M.Phil., M.BA.
S

P. Mangayarkarasi

Faculty guide

(DR. P. Mangayarkarasi, )
M.com. M.Phil. , PhD

PLACE: Madurai

DATE: 15/08/2020



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# Declaration

We hereby declare that this project was carried out by us under the guidance of DR. P. Mangayarkarasi, M.com. M.Phil., PhD Assistance professors Department of Commerce, The American College, Madurai.

We also declare that this project report is the result of our own effort and that it has not copied from any one and has not been submitted by anybody in anywhere.

S.SHYAMPRASATH SINGH (17CIT61) S. Shyam

M.SIVARAM (17CIT62) M. Sivaram

R.VELAVAN (17CIT69)

J.G.VENKATESH (17CIT70) J.G. Venkatesh

M.C.VIJAY (17CIT72) M.C. Vijay

R.VIJAYPRAKASH (17CIT73) R. Prakash



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# A STUDY ON CONSUMER'S SATISFACTION TOWARDS REDBUS ONLINE TICKET BOOKING SYSTEM

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application.


Researchers,

**S.A.KEERTHY (17CMC39)**
**K.KEERTHANA (17CMC38)**
**A.DHARANI (17CMC19)**
**S.YOGASRI (17CMC84)**

Under the guidance of,

**Dr. (Mrs.) T.GNANA GOWSALYA, M.Com., MBA., M.Phil., Ph.D.,**

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj University)


**Re-accredited with (2nd cycle) by NAAC with grade "A"**
**CGPA – 3.46 ON A 4 POINT SCALE**
**Madurai – 625002**

**April-2020**

**Dr.(Mrs.) T.GNANA GOWSALYA M.Com.,MBA.,M.Phil.,Ph.D.,**

Department of commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, **"A STUDY ON CUSTOMER SATISFACTION TOWARDS REDBUS ONLINE TICKET BOOKING SYSTEM"**, is a Bonafide research done by, **S.A.KEERTHY (17CMC39), A. DHARANI (17CMC19), K.KEERTHANA (17CMC38), S.YOGASRI (17CMC84)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

HEAD OF THE DEPARTMENT

**(Dr. D. KANAKAVALLI).**

INTERNAL PROJECT GUIDE

**(T.GNANA GOWSALYA)**

**PLACE:**

**DATE:**

S.A.KEERTHY (17CMC39)
K.KEERTHANA (17CMC38)
A.DHARANI (17CMC19)
S.YOGASRI (17CMC84)

**Department of Commerce (CA),**

**The American College,**

***Madurai.***

## DECLARATION

We, hereby declare that this project report entitled **"A STUDY ON CUSTOMER SATISFACTION TOWARDS REDBUS ONLINE TICKET BOOKING SYSTEM"** submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

HEAD OF THE DEPARTMENT

**Dr. D. KANAKAVALLI**

SIGNATURE OF THE RESEARCHER

S.A.KEERTHY (17CMC39) S A keerthy
K.KEERTHANA (17CMC38) K. Keerthana
A.DHARANI (17CMC19) A Dharani
S.YOGASRI (17CMC84) S. Yogasri

COUNTERSIFIED BY GUIDE

**(T.GNANA GOWSALYA)**

***PLACE:***

***DATE:***

## ACKNOWLEDGEMENT

First and foremost we thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.**DAVAMANICHIRSTOBER**, M.Sc., M.Phil. M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. **D.KANAKAVALLI**, M.Com, M.Phil., Ph.D, and DCA. for her encouragement throughout the preparation of this project.

We owe our special thanks to Dr. (Mrs.) T.GNANA **GOWSALYA**, M.Com. MBA, M.Phil., Ph.D for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally we express our heartfelt appreciation to our family members for their abundant support throughout this study.

S.A.KEERTHY (17CMC39) S.A.Keerthy
K.KEERTHANA (17CMC38) K.
A.DHARANI (17CMC19) A.Dharani
S.YOGASRI (17CMC84) S.Yogasri

# " IMPACT OF CONSUMER SATISFACTION TOWARDS FASTFOOD IN MADURAI CITY"

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of

**Bachelor of Commerce with computer application**


Researcher

| | |
|---|---|
| **G. BALA SUBRAMANIAN** | **(17cmc11)** |
| **A. HARISH KUMAR JAIN** | **(17cmc28)** |
| **A.KARTHICK RAJA** | **(17cmc35)** |
| **R. SATHESH RAJA** | **(17cmc66)** |
| **A.R. YASWANTH** | **(17cmc83)** |

Under the Guidance of

**Dr. Mrs. T. GNANA GOWSALYA, M.Com, MBA, M.Phil., Ph.D.,**

**Department of Commerce with Computer Application**

**The American College**

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2ND CYCLE) by NAAC with grade "A"

CGPA-3.46 ON A-POINT SCALE

Madurai-625002


APRIL-2020

Dr. Mrs. T. GNANA GOWSALLYA, M.Com , MBA, M.Phil., Ph.D.,
Department of commerce
The American College,
Madurai- 625014

## CERTIFICATE

This is to certify that this project entailed **" IMPACT OF CONSUMER SATISFACTION TOWAR DS FASTFOOD IN MADURAI CITY",** is the original work done **G. BALA SUBRAMANIAN (17cm11), A. HARISH KUMAR JAIN (17cmc28) , A. KARTHICK RAJA (17cmc35) R. SATHESH RAJA (17cmc66), A.R. YASWANTH(17cmc83)**.The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with computer application and that the project work had not previously formed the basis for the award od any Degree, Diploma, Fellowship or any other similar title

**Place: Madurai**

**Date:**

**HEAD OF THE DEPARTMENT**
**(Dr. Mrs. D. KANAKAVALLI)**

**INTERNAL PROJECT GUIDE**
**(Dr. Mrs. T. GNANA GOWSALYA)**

G. BALA SUBRAMANIAN (17CMC11)
A. HARISH KUMAR JAIN (17CMC28),
A.KARTHICK RAJA ( 17CMC35)
R. SATHESH RAJA (17CMC66),
A.R. YASWANTH (17CMC83),
**Department of Commerce (CA),**
**The American College,**
**Madurai.**

## DECLARATION BY THE REARCHERES

We, here by declare that this project report entitle" **IMPACT OF CONSUMER SATISFACTION TOWAR DS FASTFOOD IN MADURAI CITY",** submitted for the award of Degree of Bachelor of Commerce with computer application is my original work and no part of this project has been used for award, diploma, fellowship or other similar title.

**Head of department**
**(DR. Mrs. D. KAANAKAVALLI)**

**Signature of the researcher**

G. Bala G. BALA SUBRAMANIAN
HARISH A. HARISH KUMAR JAIN
KARTHICK A.KARTHICK RAJA
Sathesh R. SATHESH RAJA
Yaswanth A.R A.R. YASWANTH

**COUNTERSIFNED BY GUIDE**
**(Dr. Mrs. T. GNANA GOWSALYA)**
**PLACE:**
**DATE:**

# ACKNOWLEDGEMENT

Our express my sincere gratitude to Principal & Secretary of The American College, **Dr. M. DAVAMANICHRISTOBER** ,M.Sc., M.Phil., M.Ed., PGDCA., Ph.D.,(Inter Disciplinary), Ph.D.(math), for providing me an opportunity to do this project at the graduate level.

Our special thanks to head of the Department **Dr.Mrs.D.KANAKAVALLI**, M.Com., M.Phil., DCA., for providing me an opportunity to do this project at the graduate level.

Our express my deep gratitude to my guide **Dr. Mrs. T. GNANA GOWSALYA**, M.Com, MBA, M.Phil., Ph.D., her support and encouragement to do this project at the graduate level.

Our sincere thanks to our department staffs and our librarian.

Our special thanks to all the respondents for their kind Co-Operation in filling my Questionnaire.

We are lucky enough to be a student of The American College, where we have a well Provided library which has a valuable treasure of information.

Finally, the home front that support came in ocean form our family and friends who Have been a very helpful to me throughout the course of the project.

**G. BALA SUBRAMANIAN (17CMC11)**
**A. HARISH KUMAR JAIN (17CMC28),**
**A.KARTHICK RAJA (17CMC35)**
**R. SATHESH RAJA (17CMC66),**
**A.R. YASWANTH (17CMC83),**

s

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS APPOLO TYRES WITH SPECIAL REFERENCE TO MADURAI CITY

(Project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **ARIVU NITHI S.** | (17CMC06) |
| **JOFFIN RAJ A.** | (17CMC32) |
| **PRAVEEN KUMAR T.** | (17CMC60) |
| **SACHIN R.** | (17CMC63) |
| **VITHAN KUMAR R.** | (17CMC82) |

Under the guidance of,

Mrs. E.KEREN JUDI M.Com(CA)., M.Phil.,

Assistant Professor, Department of Commerce (CA),

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625 002

April – 2020

s

Mrs. E. Keren Judi, M.Com(CA).,M.Phil.,

Assistant Professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the research entitled, "A Study On Consumer's Satisfaction Towards Apollo Tyres with special reference to Madurai City", is a Bonafide research done by, **ARIVU NITHI S.(17CMC06), JOFFIN RAJ A.(17CMC32), PRAVEEN KUMAR T.(17CMC60), SACHIN R.(17CMC63) , VITHAN KUMAR R.(17CMC82)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(E. Keren Judi)

**PLACE:**

**DATE:**

s

**ARIVU NITHI S (17CMC06)**

**JOFFIN RAJ A (17CMC32)**

**PRAVEEN KUMAR T (17CMC60)**

**SACHIN R (17CMC63)**

**VITHAN KUMAR R (17CMC82)**

**Department of Commerce (CA),**

**The American College,**

**Madurai – 625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Apollo Tyres with special reference to Madurai City"- submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

ARIVU NITHI S.

JOFFIN RAJ A.

PRAVEEN KUMAR T.

SACHIN R.

VITHAN KUMAR R.

PLACE:

DATE:

s

## ACKNOWLEDGEMENT

First and foremost, we thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M. Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B. Com with Computer Application Dr. D. Kanakavalli, M.Com., M.Phil., Ph.D., DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. E. Keren Judi, M. Com (CA)., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# ALUMNI RECORD MANAGEMENT SYSTEM

SUBMITTED

BY


| | |
|---|---|
| ANANDH J A | (17CMC03) |
| BHAVAN KALYAN K | (17CMC12) |
| HARI VIGNESHWARAN R | (17CMC27) |
| KARTHICK M | (17CMC34) |
| PRASANNA B | (17CMC58) |


Under the guidance of

Mrs.M.GIRIJA, M.C.A., M.Phil.,

Submitted to

The Department of Computer Science(UG)

FOR THE PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF

B.Com(COMPUTER APPLICATION)




## THE AMERICAN COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with Grade "A"

MADURAI – 625002

APRIL 2020

**THE AMERICAN COLLEGE**

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with Grade "A"

MADURAI – 625002

APRIL 2020

## BONAFIDE CERTIFICATE

This is to certify that project work entitled "ALUMNI RECORD MANAGEMENT SYSTEM" is a bonafied record of work done by ANANDH.J.A(17CMC03), BHAVAN KALYAN.K(17CMC12), HARI VIGNESHWARAN.R(17CMC27), KARTHICK.M(17CMC34), PRASANNA.B(17CMC58) in partial fulfilment of the requirements for the award of the degree of B.Com(COMPUTER APPLICATION) of THE AMERICAN COLLEGE. This work has not been submitted for the award of any degree to the best of your knowledge.

M. Ginja
Internal Guide

Head of the Department

Submitted for Viva-Voice Examination, held on _____, in the Department of Computer Science, The American College, Madurai.

M. Ginja
Internal Examiner

External Examiner

Place : Madurai

Date :

# DECLARATION

I hereby declare that the project work entitled "ALUMNI RECORD MANAGEMENT SYSTEM" submitted to the Department of Computer Science, The American College affiliated to Madurai Kamaraj University in partial fulfilment of the requirements for the award of the degree of B.Com(COMPUTER APPLICATION) is a project work done by group under the guidance of Mrs.GIRIJA M.C.A., M.Phil., Lecturer, THE AMERICAN COLLEGE, Madurai. This project has not formed the basis for the award of any Degree/Diploma/Fellowship or Similar to any candidate of any university.

Place : Madurai

Date :

ANANDH J A

(17CMC03)

BHAVAN KALYAN K

(17CMC12)

HARI VIGNESHWARAN R

(17CMC24)

KARTHICK M

(17CMC34)

PRASANNA B

(17CMC58)

# ACKNOWLEDGEMENT

The merits of our project depends only on the wide panorama of the people who have devoted their precious time, and valuable suggestion as well as guidance to our project.

We are highiy obliged to our principal **Dr.M.DavamaniChristober.M.Sc.,M.Phil.,M.Ed.,PGDCA.,Ph.D.** and our **H.O.D Dr. D.Kanakavalli.M.Com.,M.Phil.,DCA.,Ph.D.** mam who passed our project as its very initial stage of planning. Also she told us to work on the project at the starting of the year. Also she told us to take the help of her if we want in our project.

I also express our gratitude toward our project guide **Mrs. M.Girija M.C.A., M.Phil.,** who has guided as well as helped from the apex of our project.

The collection of the various ideas and the progress of our project depend upon the intellectual of all the staff members in our department. I would like to express our group members who have hard work on project and made it successfully by the time of submission.

# "A STUDY ON CONSUMER SATISFACTION TOWARDS YAMAHA BIKES IN MADURAI CITY"

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of

**Bachelor of Commerce with computer application**


Researcher

| | |
|---|---|
| **D.AAKASH** | **(17cmc01)** |
| **N.ARAVINDA KUMAR** | **(17cmc05)** |
| **D.DEVANANTH** | **(17cmc17)** |
| **J.JAYABASKARAN** | **(17cmc29)** |
| **A.MOHAMMED AFZAL** | **(17cmc50)** |

Under the Guidance of

**Mrs. E.KEREN JUDI M.Com (CA)., M.Phil.,**

**Lecturer-Management (B.com CA).**

**Department of Commerce with Computer Application**

**The American College**

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2ND CYCLE) by NAAC with grade "A"

CGPA-3.46 ON A-POINT SCALE

Madurai-625002


APRIL-2020

Mrs.E. KEREN JUDI, M.Com(CA), M.Phil.,
Department of commerce
The American College,
Madurai- 625014

## CERTIFICATE

This is to certify that this project entailed **"A STUDY OF CONSUMER SATISFACTION TOWARDS YAMAHA BIKES IN MADURAI CITY"**, is the original work done by

**D.AAKASH (17CMC01), N.ARAVINDA KUMAR (17CMC05), D.DEVANANTH (17CMC17),J.JAYABASKARAN(17CMC29), A.MOHAMMED AFZAL(17CMC50)**

The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with computer application and that the project work had not previously formed the basis for the award od any Degree, Diploma, Fellowship or any other similar title

**Place: Madurai**

**Date:**

**HEAD OF THE DEPARTMENT**

**GUIDE**

**(Dr. D. KANAKAVALLI)**

**INTERNAL PROJECT**

**(Mrs.E.KEREN JUDI)**

D.AAKASH (17cmc01)
N.ARAVINDA KUMAR (17cmc05)
D.DEVANANTH (17cmc17)
J.JAYABASKARAN (17cmc29)
A.MOHAMMED AFZAL (17cmc50)

Department of Commerce (CA),
The American College,
Madurai.

## DECLARATION BY THE REARCHERES

We, hereby declare that this project report entitle **"A STUDY ON CONSUMER SATISFACTION TOWARDS YAMAHA BIKES IN MADURAI CITY"**, submitted for the award of Degree of Bachelor of Commerce with computer application is my original work and no part of this project has been used for award, diploma, fellowship or other similar title.

**Head of department**
**(DR. D. KANAKAVALLI)**
**researcher**

**Signature of the**

D. AAKASH
N. ARAVINDHA KUMAR
D. DEVANANTH
J . JAYABASKARAN
A.MOHAMMED AFZAL

**COUNTERSIFNED BY GUIDE**

**PLACE:**

DATE:

## ACKNOWLEDGEMENT

Our express my sincere gratitude to Principal & Secretary of The American College, **Dr. M. DAVAMANI CHRISTOBER** M.Sc., M.Phil., M.Ed., PGDCA., Ph.D.,(Inter Disciplinary), Ph.D(math), for providing me an opportunity to do this project at the graduate level.

Our special thanks to head of the Departmenta **Dr. Mrs. D.KANAKAVALLI**, M.Com., M.Phil., for providing me an opportunity to do this project at the graduate level.

Our express my deep gratitude to my guide **Mrs.E. KEREN JUDI** , M.Com(CA), M.Phil, her support and encouragement to do this project at the graduate level.
Our special thanks to all the respondents for their kind Co-Operation in filling my Questionnaire.

We are lucky enough to be a student of The American College, where we have a well Provided library which has a valuable treasure of information.

Finally, the home front that support came in ocean form our family and friends who Have been a very helpful to me throughout the course of the project.

**D.AAKASH** (17cmc01)

**N.ARAVINDA KUMAR** (17cmc05)

**D.DEVANANTH** (17cmc17)

**J.JAYABASKARAN** (17cmc29)

**A.MOHAMMED AFZAL** (17cmc50)

# A STUDY ON CONUSMER'S SATISFACTION TOWARDS RELIANCE JIO NETWORK IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of commerce with computer application)


Researchers,

ARUL GRACY A. (17CMC08)

BHUVANA R. (17CMC13)

DEIVA SRI K. (17CMC16)

KARTHIKA V. (17CMC36)

KAVIYA J. (17CMC37)

Under the guidance of,

Ms. SALLY M., M.com., M.Phil.,

Assistant professor, Department of commerce (CA)

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai kamaraj University)

Re-accredited with (2cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002


April- 2020

Ms. SALLY M., M.com., M.Phil.,
Assistant professor,
Department of commerce (CA),
The American college,
Madurai – 625002

# CERTIFICATE

This is to certify that the project research entitled, "A study on consumer's satisfaction towards Reliance jio network in Madurai city ", is a Bonafide research done by, ARUL GARCY A.(17CMC08),BHUVANA R.(17CMC13),DEIVA SRI K.(17CMC16), KARTHIKA V.(17CMC36),KAVIYA J.(17CMC37) under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer application and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department
(Dr. D. Kanakavalli)

Faculty guide
(Ms. Sally M.)

PLACE:

DATE:

ARUL GRACY A (17CMC08)
BHUVANA R (17CMC13)
DEIVA SRI K (17CMC16)
KARTHIKA V (17CMC36)
KAVIYA J (17CMC37)
Department of commerce(CA)
The American college,
Madurai- 625002

## DECLARATION

We, hereby declare that this project report entitled "A Study on consumer's satisfaction towards Reliance Jio network in Madurai city" submitted for the award of degree of bachelor of commerce with computer application is our original work and no part of this project reports has been used for award, diploma, fellowship or other similar title.

SIGNATURE

ARUL GRACY A. A. Arul Gracy
BHUVANA R. R. Bhuvana
DEIVA SRI K. K. Deiva
KARTHIKA V. V. Karthika.
KAVIYA J. J. Kaviya

PLACE:

DATE:

## ACKNOWLEDGEMENT

First and foremost we lord almighty for his abundant blessings which He showered on us throughout the preparation of this project, without him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal, Dr.M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.d.,(inter Disciplinary), Ph.d.,(Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B. Com with Computer Application Dr. D. Kanakavalli, M.Com., M.Phil., Ph.d, DCA., for her encouragement throughout the preparation of this projrct

We own our special thanks to Ms. Sally M., M.Com., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind co- operation in providing your valuable responses which served as the primary data in our project.

Finally we express our heartfelt appreciation to our family members for their abundant support throughout this study.

# " IMPACT OF POSTAL SAVINGS SCHEMES IN MADURAI"

A Dissertation submitted to The American College, Madurai in Partial Fulfilment of the requirements for the Degree of

**Bachelor of commerce with Computer Application**


Researcher

D.THOMASWALKER,

K.BALAJI, S.MUTHUSARAVANA,

E.ANDREWS DURAIPANDIAN, S.KISHOREVKUMAR.

Under the Guidance of

**MRS. T.GNANA GOWSALYA, M.com, MBA, M.phil,. Ph.D,.**


**Since 1881**

**Department of Commerce with Computer Application**

**The American College**

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2ND CYCLE) by NAAC with grade "A"

CGPA-3.46 ON A 4-POINT SCALE

Madurai-625002

APRIL-2020

Dr. Mrs. T. GNANA GOWSALLYA, M.Com , MBA, M.Phil., Ph.D.,
Department of commerce
The American College,
Madurai- 625014

## CERTIFICATE

This is to certify that this project entailed " **IMPACT OF POSTAL SAVINGS SCHEMES IN MADURAI"**, is the original work done **E. ANDREWS DURAIPANDIAN (17CMC04), K. BALAJI (17CMC10),S.KISHOREKUMER(17CMC41),S.MUTHUSARAVANA(17CMC53),D.THOMASWALKER (17CMC73)**.The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with computer application and that the project work had not previously formed the basis for the award od any Degree, Diploma, Fellowship or any other similar title

**Place: Madurai**

**Date:**

**HEAD OF THE DEPARTMENT**

**(Dr. D. KANAKAVALLI)**

**INTERNAL PROJECT GUIDE**

**(Dr. T. GNANA GOWSALYA**

E. ANDREWS DURAIPANDIAN, (17CMC04)
K. BALAJI (17CMC10)
S. KISHORE KUMAR (17CMC41)
S. MUTHU SARAVANA (17CMC53)
D. THOMASWALKER (17CMC73)
Department of Commerce (CA),
The American College,
Madurai.

## DECLARATION BY THE REARCHERES

We, hereby declare that this project report entitle" **IMPACT OF POSTAL SAVINGS SCHEMES IN MADURAI",** submitted for the award of Degree of Bachelor of Commerce with computer application is my original work and no part of this project has been used for award, diploma, fellowship or other similar title.

**Signature of the researcher**

E. ANDREWS DURAIPANDIAN 17CMC04 E. Andrews Duraipandian.

K. BALAJI 17CMC10 K. Balaji

S. KISHORE KUMAR 17CMC41 S. Kishore Kumar

S. MUTHU SARAVANA 17CMC53

D.THOMASWALKER 17CMC73 D. Thomaswalker.

COUNTERSIFNED BY GUIDE

PLACE:

DATE:

## ACKNOWLEDGEMENT

Our express my sincere gratide to Principal & Secretary of The American College, **Dr. M. DAVAMANICHRISTOBER** ,M.Sc., M.Phil., M.Ed., PGDCA., Ph.D.,(Inter Disciplinary), Ph.D., (math), for providing me an opportunity to do this project at the graduate level.

Our special thanks to head of the Department **Dr. Mrs.D.KANAKAVALLI**, M.Com., M.Phil., DCA., for providing me an opportunity to do this project at the graduate level.

Our express my deep gratitude to my guide **Dr. Mrs. T. GNANA GOWSALYA**, M.Com, MBA, M.Phil., Ph.D., her support and encouragement to do this project at the graduate level.

Our special thanks to all the respondents for their kind Co-Operation in filling my Questionnaire.

We are lucky enough to be a student of The American College, where we have a well Provided library which has a valuable treasure of information.

Finally, the home front that support came in ocean form our family and friends who Have been a very helpful to me throughout the course of the project.

**E.ANDREWS DURAI PANDIAN 17CMC04**

**K. BALAJI 17CMC10**

**S. KISHORE KUMAR 17CMC41**

**S. MUTHU SARAVANA 17CMC53**

**D. THOMASWALKER 17CMC73**

# A STUDY ON CONSUMER'S PERCEPTION TOWARDS FOOD DELIVERY APPS IN MADURAI CITY

(Project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **DHEEBATHA P.** | (17CMC20) |
| **HARI PRIYA J.** | (17CMC26) |
| **PAVITHRA G.** | (17CMC56) |
| **SANTHIYA K.** | (17CMC64) |
| **SHRUTHI H.** | (17CMC70) |

Under the guidance of,

**Mrs. N. Bairavi, M.Com., DCA., (Ph.D).,**

Assistant Professor, Department of Commerce (CA),

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj Univercity)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625 002

April – 2020

Mrs. N. Bairavi, M.Com., DCA., (Ph.D).,

Assistant Professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the research entitled, "A Study On Consumer's Perception Towards Food Delivery Apps In Madurai City", is a Bonafide research done by, **DHEEBATHA P. (17CMC20), HARI PRIYA J.(17CMC26), PAVITHRA G.(17CMC56), SANTHIYA K. (17CMC64), SHRUTHI H.(17CMC70)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(N. Bairavi)

**PLACE :**

**DATE :**

**DHEEBATHA P(17CMC20)**

**HARI PRIYA J(17CMC26)**

**PAVITHRA G(17CMC56)**

**SANTHIYA K(17CMC64)**

**SHRUTHI H(17CMC70)**

**Department of Commerce (CA),**

**The American College,**

**Madurai – 625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Perception Towards Food Delivery Apps In Madurai City"- submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

DHEEBATHA P. P. Dheebatha.
HARI PRIYA J. J. Hari priya
PAVITHRA G. G. Pthj
SANTHIYA K. K. Santhiya.
SHRUTHI H. Shruthi.H

PLACE :

DATE :

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. N. Bairavi, M.Com., DCA., (Ph.D)for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON USER'SSATISFACTION TOWARDS

## E-PAYMENT APPS

(A Project Report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with Computer Application)


**Researchers,**

| | |
|---|---|
| **Arjunan .K** | (17CMC07) |
| **Dhilip Kumar .K** | (17CMC21) |
| **Mohamed Ishak .S** | (17CMC47) |
| **RiyazKhaan .A** | (17CMC61) |
| **Vijai .M** | (17CMC76) |

Under the Supervision and Guidance of

**Mrs. N. Bairavi,** M.Com., DCA., (Ph.D)

Assistant Professor, Department of Commerce (CA),

The American College

Madurai






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002



April-2020

**Mrs. N. Bairavi,** M.Com., DCA., (Ph.D)
Assistant Professor,
Department of Commerce (CA),
The American College

## CERTIFICATE

This is to certify that the project research entitled "A Study on user'sSatisfaction towardsE-Payment Apps" is a Bonafide research done by, **Arjunan K. (17CMC07), Dhilip Kumar K. (17CMC21), Mohamed Ishak S. (17CMC47), RiyazKhaan A. (17CMC61), Vijai M. (17CMC76)**under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer application and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

**(Dr. D. Kanakavalli)**

Faculty guide

**(N. Bairavi)**

Place:

Date:

**K. Arjunan - 17CMC07**

**K. Dhilip Kumar - 17CMC21**

**S. Mohamed Ishak - 17CMC47**

**A. RiyazKhaan - 17CMC61**

**M. Vijai - 17CMC76**

Department of Commerce with Computer Application,

The American College,

Madurai - 625 002

## DECLARATION

We, hereby declare that this project report entitled "A Study on User`s Satisfaction Towards E-Payment Apps" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

**SIGNATURE OF THE RESEARCHERS**

Arjunan K.

Dhilip Kumar K.

Mohamed Ishak S. S. Mohamed Isak

RiyazKhaan A. A. Riyaz Kha.

Vijai M. M. vijai

Place:

Date:

## ACKNOWLEDGEMENT

First and foremost we thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M. Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com, M.Phil., Ph.D., DCA, for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. N.Bairavi, M.Com, DCA, (Ph.D.) for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally we express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS HERO MOTOCORP IN MADURAI CITY

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **AMRISH.P** | (17CMC02) |
| **HANSA GUHAN.U** | (17CMC25) |
| **ARUN KUMAR. P** | (17CMC09) |
| **JOHN KIRUBAKARAN.R** | (17CMC33) |
| **KIRUVESH SANDEEP. D** | (17CMC40) |

Under the guidance of,

**Mrs. N. Bairavi, M.Com., DCA., (Ph.D)**
Assistant Professor, Department of Commerce (CA),
The American College






THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002

April-2020

Mrs. N. Bairavi, M.Com., DCA., (Ph.D)
Assistant Professor, Department of Commerce (CA),
The American College,
Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Consumer's Satisfaction Towards Hero motocorp in Madurai City", is a bonafide research done by, **AMRISH.P (17CMC02), HANSA GUHAN.U (17CMC25), ARUN KUMAR.P (17CMC09), JOHN KIRUBAKARAN.R (17CMC33), KIRUVESH SANDEEP.D (17CMC40),** under my guidance in partial fulfillment of the award of bachelor's degree ofcommerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head oftheDepartment

(Dr.D.Kanakavalli)

Facultyguide

(Mrs. N.Bairavi)

**PLACE:** MADURAI

**DATE:**

**AMRISH .P** (17CMC02)
**HANSA GUHAN .U** (17CMC25)
**ARUN KUMAR .P** (17CMC09)
**JOHN KIRUBAKARAN .R** (17CMC33)
**KIRUVESH SANDEEP .D** (17CMC40),

**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Hero motocorp in Madurai City -With Special Reference to College Students In Madurai City" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

JOHN KIRUBAKARAN .R
KIRUVESH SANDEEP .D
HANSA GUHAN .U
ARUN KUMAR .P
AMRISH .P

PLACE: MADURAI

DATE:

## ACKNOWLEDGEMENT

First and foremost we thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. N. Bairavi, M.Com., DCA., (Ph.D) for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally, we express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS SUPER MARKETS WITH SPECIAL REFERENCE TO COLLEGE STUDENTS IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **JAYALAKSHMI SUDHA M.** | (17CMC30) |
| **POORNI SHOSHMA G.K.** | (17CMC57) |
| **SHALINI N.** | (17CMC67) |
| **YOGAVALLI K.** | (17CMC85) |

Under the guidance of,

Mrs. E.KEREN JUDI M.Com(CA)., M.Phil.,

Lecturer – Management (B.Com CA),

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002



April-2020

Mrs. E.Keren Judi, M.Com(CA)., M.Phil.,

Lecturer - Management (B.ComCA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Consumer's Satisfaction Towards SuperMarkets In Madurai City", is a Bonafide research done by, **JAYALAKSHMI SUDHA M.(17CMC30), POORNI SHOSHMA G.K.(17CMC57), SHALINI N.(17CMC67), YOGAVALLI K.(17CMC85)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(E. Keren Judi)

**PLACE :**

**DATE :**

**JAYALAKSHMI SUDHA M(17CMC30)**

**POORNI SHOSHMA G K(17CMC57)**

**SHALINI N(17CMC67)**

**YOGAVALLI K(17CMC85)**

**Department of Commerce (CA),**

**The American College,**

**Madurai – 625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Super Markets In Madurai City"-With Special Reference To College Students In Madurai City" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

JAYALAKSHMI SUDHA M. Jayalakshmi Sudha

POORNI SHOSHMA G.K

SHALINI N Shalini

YOGAVALLI K K. Yogavalli

PLACE:

DATE:

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. E.Keren Judi , M.Com(CA)., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER BUYING BEHAVIOR OF MOBILE PHONE IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **KOTTAI SELVAM S.** | **(17CMC42)** |
| **MOHAMMED JAMEEL J.** | **(17CMC48)** |
| **SANTHOSH RAJ C.** | **(17CMC65)** |
| **VASANTH KUMAR T.** | **(17CMC75)** |
| **VINOTH KUMAR R.** | **(17CMC79)** |

Under the supervision and guidance of,

**Ms. N. Bairavi, M.Com., DCA., (Ph.D)**

Assistant Professor, Department of Commerce (CA),
The American College



THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002

April-2020

**Ms. N. Bairavi**, M.Com., DCA., (Ph.D)

Assistant Professor,

Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study on Consumer Buying Behavior of Mobile Phone In Madurai City", is a Bonafide research done by, **KOTTAI SELVAM S.(17CMC42),MOHAMMED JAMEEL J.(17CMC48), SANTHOSH RAJ C.(17CMC65), VASANTH KUMAR T.(17CMC75),VINOTH KUMAR R.(17CMC79)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(N.Bairavi)

**PLACE :**

**DATE :**

**KOTTAI SELVAM S (17CMC42)**
**MOHAMMED JAMEEL J (17CMC48)**
**SANTHOSH RAJ C (17CMC65)**
**VASANTH KUMAR T (17CMC75)**
**VINOTH KUMAR R (17CMC79),**

**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that project report entitled "A Study on Consumer Buying Behavior of Mobile Phone with Special Reference to Madurai District", submitted for the award of Degree of Bachelor of Commerce with Computer Application is our original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

KOTTAI SELVAM S
MOHAMMED JAMEEL J
SANTHOSH RAJ C
VASANTH KUMAR T
VINOTH KUMAR R

PLACE :

DATE :

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal **Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math)** for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application **Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA.,** for her encouragement throughout the preparation of this project.

Our heartfelt thanks to my guide **Mrs. N. Bairavi, M.Com., DCA., (Ph.D)** for her immense guidance & make me to do the project enthusiastically.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CUSTOMER PREFERENCE TOWARDS APPLE IPHONE IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)

Researchers,

| | |
|---|---|
| **LEO ANTONY J.** | (17CMC43) |
| **MENON PRAISEWIN M.** | (17CMC46) |
| **SHEIK MOHAMMED S.** | (17CMC69) |
| **SIVANESAWARAN S.** | (17CMC71) |
| **YUVARAJ V.** | (17CMC86) |

Under the guidance of,

Ms. SALLY M, M.Com., M.Phil.,
Assistant Professor,
Department of Commerce (CA),
The American College

THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002

April-2020

Ms. Sally M, M.Com., M.Phil.,
Assistant Professor, Department of Commerce (CA), The
American College,
Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Customer Preference Towards Apple Iphone In Madurai City", is a Bonafide research done by, **LEO ANTONY J (17CMC43), MENON PRAISEWIN M (17CMC46), SHEIK MOHAMMED S (17CMC69), SIVANESAWARAN S (17CMC71), YUVARAJ V (17CMC86)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(Sally M)

**PLACE :**

**DATE :**

**LEO ANTONY J (17CMC43)**
**MENON PRAISEWIN M (17CMC46)**
**SHEIK MOHAMMED S (17CMC69)**
**SIVANESAWARAN S (17CMC71)**
**YUVARAJ V (17CMC86),**

**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Customer Preference Towards Apple Iphone In Madurai City - submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

**SIGNATURE**

LEO ANTONY J.
MENON PRAISEWIN M.
SHEIK MOHAMMED S.
SIVANESAWARAN S.
YUVARAJ V.

**PLACE :**

**DATE :**

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Interdisciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Ms. Sally M, M.Com., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Cooperation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS AMAZON PORTAL WITH SPECIAL REFERENCE TO MADURAI CITY

(Project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **DAVID J.** | (17CMC15) |
| **MAHAMUNI M.** | (17CMC44) |
| **MOHAMMED FAYAZ M.** | (17CMC51) |
| **SHANMUGAPRABU K.** | (17CMC68) |
| **SONA JEGA PRAVEEN M.** | (17CMC72) |

Under the guidance of,

**Mrs. E. Keren Judi M.Com(CA)., M.Phil.,**

Assistant Professor, Department of Commerce (CA),

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj Univercity)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625 002

April – 2020

Mrs. E. Keren Judi, M.Com(CA).,M.Phil.,

Assistant professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the research entitled, "A Study On Consumer's Satisfaction Towards Amazon Portal with special reference to Madurai City", is a Bonafide research done by, **DAVID J.(17CMC15), MAHAMUNI M.(17CMC44), MOHAMMED FAYAZ M.(17CMC51), SHANMUGAPRABU K.(17CMC68) , SONA JEGA PRAVEEN M.(17CMC72)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(E. Keren Judi)

**PLACE :**

**DATE :**

**DAVI J(17CMC15)**

**MAHAMUNI M(17CMC44)**

**MOHAMMED FAYAZ M(17CMC51)**

**SHANMUGAPRABU K(17CMC68)**

**SONA JEGA PRAVEEN M(17CMC72)**

**Department of Commerce (CA),**

**The American College,**

**Madurai – 625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Amazon Portal with special reference to Madurai City"- submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

DAVID J.

MAHAMUNI M.

MOHAMMED FAYAZ M.

SHANMUGAPRABU K.

SONA JEGA PRAVEEN M.

PLACE :

DATE :

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. E.Keren Judi , M.Com(CA)., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS TITAN WATCHESIN MADURAI CITY

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **DHIVAKAR M.** | **(17CMC22)** |
| **GURU A .** | **(17CMC24)** |
| **MOHAMED WASIM K.** | **(17CMC52)** |
| **RUBAN MANO JOSHUA R.** | **(17CMC62)** |
| **UDHAYA CHANDRAN M.** | **(17CMC74)** |
| **VINAYAK B .** | **(17CMC77)** |

Under the guidance of,
Ms. M.SALLY M.Com., M.Phil.,
Assistant Professor, Department of Commerce (CA),
The American College



THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)
Re-accredited with (2nd cycle) by NAAC with grade "A"
CGPA – 3.46 ON A 4 POINT SCALE
Madurai – 625002
April-2020

Ms. M. Sally, M.Com., M.Phil.,

Assistant Professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Consumer's Satisfaction Towards Titan Watches In Madurai City", is a Bonafide research done by DHIVAKAR M. (17CMC22), A. GURU (17CMC24), MOHAMED WASIM K. (17CMC52), RUBAN MANO JOSHUA R. (17CMC62) UDHAYA CHANDRAN M. (1CMC74), VINAYAK B
(17CMC77)under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(M. Sally)

**PLACE:**

**DATE :**

DHIVAKAR M. (17CMC 22)

GURU A . (17CMC24)

MOHAMED WASIM K. (17CMC52)

RUBAN MANO JOSHUA R. (17CMC62)

UDHAYA CHANDRAN M. (17CMC74)

VINAYAK B . (17CMC77)

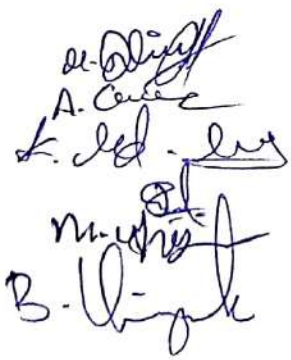
**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Titan Watches In Madurai City" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.



**SIGNATURE**
DHIVAKAR M.
GURU A.
MOHAMMED WASIM K.
RUBAN MANO JOSHUA R.
UDAYA CHANDRAN M.
VINAYAK B.

**PLACE:**
**DATE:**

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.DavamaniChristober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Ms. M.Sally, M.Com., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our qestioner

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS ROYAL ENFIELD IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **DHAMOTHARAN M.** | (17CMC18) |
| **NIYAS SHERIFF U.** | (17CMC55) |
| **PRAVEEN KUMAR R.** | (17CMC59) |
| **VINOTH KUMAR R.** | (17CMC78) |
| **VISHAL S.** | (17CMC81) |

Under the guidance of,

Ms. M.SALLY M.Com., M.Phil.,
Assistant Professor, Department of Commerce (CA),
The American College



THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002

April-2020

Ms. M. Sally, M.Com., M.Phil.,

Assistant Professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Consumer's Satisfaction Towards Royal Enfield In Madurai City", is a Bonafide research done by, **DHAMOTHARAN M.(17CMC18), NIYAS SHERIFF U.(17CMC55), PRAVEEN KUMAR R.(17CMC59), VINOTH KUMAR R.(17CMC78), VISHAL S.(17CMC81)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(M. Sally)

**PLACE :**

**DATE :**

**DHAMOTHARAN M (17CMC18)**
**NIYAS SHERIFF U (17CMC55)**
**PRAVEEN KUMAR R (17CMC59)**
**VINOTH KUMAR R (17CMC78)**
**VISHAL S (17CMC81),**

**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Royal Enfield In Madurai City -With Special Reference to College Students In Madurai City" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

DHAMOTHARAN M.
NIYAS SHERIFF U.
PRAVEEN KUMAR R.
VINOTH KUMAR R.
VISHAL S.

PLACE :

DATE :

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Ms. M.Sally, M.Com., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

## COS 3684 (A) – PROJECT DEVELOPMENT LAB - APRIL 2019 - 2020

| S.No | ROLLNUMBER | NAME | INTERNAL 75 | EXTERNAL 25 |
|---|---|---|---|---|
| 1 | 17COS01 | S.AFFRIN SHEFANA | 55 | 20 |
| 2 | 17COS03 | A.ANTONY ARUN KUMAR | 50 | 10 |
| 3 | 17COS04 | N.P.ARAVIND | 60 | 17 |
| 4 | 17COS05 | S.ARSATH IBRAS | 50 | 10 |
| 5 | 17COS06 | Z.ASLAM SUZA | 50 | 20 |
| 6 | 17COS07 | A.BALA VASAGAN | 45 | 15 |
| 7 | 17COS08 | V.BALACHANDRAN | 50 | 20 |
| 8 | 17COS09 | D.BALAJI | 55 | 15 |
| 9 | 17COS10 | D.V.BENSON ANTONY | 65 | 20 |
| 10 | 17COS11 | R.BHARATH | 50 | 15 |
| 11 | 17COS12 | A.CAMBRIDEGE BALIN | 50 | 20 |
| 12 | 17COS14 | R.CHARLES IMMANUEL RAJ | 45 | 15 |
| 13 | 17COS15 | R.DANIELL JOHN | 55 | 22 |
| 14 | 17COS16 | R.J.DEVADHARSAN | 40 | 20 |
| 15 | 17COS18 | A.DINESH KUMAR | 47 | 18 |
| 16 | 17COS19 | ESSAC ROBIN | 45 | 15 |
| 17 | 17COS20 | F.FRANCIS PRABHAKAR | 50 | 15 |
| 18 | 17COS21 | B.GOBIKA | 60 | 20 |
| 19 | 17COS22 | M.GOKUL | 50 | 13 |
| 20 | 17COS23 | S.GOWSIKAN | 50 | 20 |
| 21 | 17COS24 | J.GUHAN | 50 | 14 |
| 22 | 17COS25 | S.HARIHARAN | 60 | 20 |

| | | | | |
|---|---|---|---|---|
| 23 | 17COS26 | T.HARIHARAN | 45 | 15 |
| 24 | 17COS27 | R.HARINI DEVI | 50 | 21 |
| 25 | 17COS28 | J.JACOB ANTONY | 50 | 15 |
| 26 | 17COS29 | H.JEFFRY JAMES | 60 | 21 |
| 27 | 17COS30 | M.JOEL KEVIN | 60 | 20 |
| 28 | 17COS32 | J.JOTHAM REX | 45 | 15 |
| 29 | 17COS34 | A.KARPAGAM | 65 | 20 |
| 30 | 17COS35 | P.KARTHIKEYAN | 50 | 15 |
| 31 | 17COS36 | S.KEERITHIKA | 48 | 17 |
| 32 | 17COS37 | N.KISHORE | 60 | 20 |
| 33 | 17COS38 | SB.LAKSHMAN RAJ | 70 | 20 |
| 34 | 17COS39 | B.LAXMAN | 55 | 15 |
| 35 | 17COS42 | M.MOHAMED ABUBUCKER SIDDIQ | 50 | 15 |
| 36 | 17COS43 | A.MOHAMMED ISMAIL | 50 | 12 |
| 37 | 17COS44 | S.MOHANKUMAR | 55 | 20 |
| 38 | 17COS45 | R.MUGESH | 52 | 18 |
| 39 | 17COS46 | P.PARIMALA DEVI | 50 | 10 |
| 40 | 17COS47 | P.POOVARASAN | 60 | 20 |
| 41 | 17COS48 | V.PRASANNA | 60 | 20 |
| 42 | 17COS49 | D.PRAVEEN RAJ | 55 | 20 |
| 43 | 17COS50 | M.RAHUL RAJ | 45 | 20 |
| 44 | 17COS51 | M.RAJA SRIDHAR | 55 | 21 |
| 45 | 17COS52 | V.RAJESH | 50 | 10 |
| 46 | 17COS53 | S.ROHAN BABU | 50 | 15 |

| | | | | |
|---|---|---|---|---|
| 47 | 17COS54 | I.B.ROSHAN ABISHEIK RAAJ | 50 | 20 |
| 48 | 17COS55 | S.SAKTHIVEL | 45 | 20 |
| 49 | 17COS56 | S.SANTHOSH | 48 | 18 |
| 50 | 17COS57 | J.SARAVANAN | 50 | 12 |
| 51 | 17COS58 | M.SASI KUMAR | 50 | 15 |
| 52 | 17COS59 | M.SHARAN KUMAR | 45 | 15 |
| 53 | 17COS61 | S.SIVASANGARI | 49 | 18 |
| 54 | 17COS65 | J.THOMAS JEFFERSON DANIEL | 49 | 18 |
| 55 | 17COS66 | J.TOM ANTONY AGASSI | 45 | 15 |
| 56 | 17COS67 | K.VAIRAM | 60 | 15 |
| 57 | 17COS68 | R.VARSHA | 55 | 18 |
| 58 | 17COS69 | S.VELANGANNI AROCKIA DOSS | 45 | 15 |
| 59 | 17COS70 | M.VENKATA NARAYANAN | 60 | 15 |
| 60 | 17COS71 | P.VIGNESHWARAN | 60 | 20 |
| 61 | 17COS72 | P.VISHNUKUMAR | 50 | 15 |
| 62 | 17COS73 | B.J.VISHWA PRASAD | 50 | 15 |
| 63 | 17COS74 | M.YOGESHWARAN | 50 | 15 |
| 64 | 17COS75 | M.S.YUKESH | 50 | 15 |

**Head of the Department**

Head of the Department
Department of Computer Science
The American College
Madurai-625002

## COS 3684(B) – PROJECT DEVELOPMENT LAB - APRIL 2019 - 2020

| S.NO | ROLLNUMBER | NAME | INTERNAL 75 | EXTERNAL 25 |
|---|---|---|---|---|
| 1 | 17COS77 | M.ABHISHEK | 50 | 10 |
| 2 | 17COS78 | M.ALAGAR | 60 | 20 |
| 3 | 17COS80 | G.ARUN PANDIAN | 54 | 20 |
| 4 | 17COS81 | T.R.ARUNKUMAR | 60 | 20 |
| 5 | 17COS82 | V.AYYANG KALAI | 50 | 10 |
| 6 | 17COS83 | R.BABURAJ | 55 | 15 |
| 7 | 17COS84 | R.BALAJI | 65 | 18 |
| 8 | 17COS85 | U.CALEB DANIEL | 55 | 18 |
| 9 | 17COS86 | S.M.DEEPAK | 65 | 20 |
| 10 | 17COS87 | R.DEEPAK GOWTHAM | 50 | 15 |
| 11 | 17COS88 | M.DEEPAK KUMAR | 50 | 15 |
| 12 | 17COS89 | J.DINESH | 50 | 15 |
| 13 | 17COS90 | J.GEO | 55 | 12 |
| 14 | 17COS92 | R.HARI RAM PRASATH | 55 | 15 |
| 15 | 17COS93 | A.ISHWARIYA LAKSHMI | 60 | 15 |
| 16 | 17COS94 | A.JAMES KANSTAN ROY | 50 | 15 |
| 17 | 17COS95 | T.JEEVA | 55 | 15 |
| 18 | 17COS97 | B.JOTHIPANDI | 45 | 15 |
| 19 | 17COS99 | Mr. KALESH. M | 45 | 15 |
| 20 | 17COS100 | .MM.K.LAKSHMANAN BABU | 55 | 17 |
| 21 | 17COS101 | J.LAKSHUMANA PERUMAL | 65 | 20 |
| 22 | 17COS102 | J.LOORDHU SOUNDARYA | 55 | 18 |

| | | | | |
|---|---|---|---|---|
| 23 | 17COS104 | N.MANOJ | 50 | 20 |
| 24 | 17COS106 | S.MOHAMED ABDULLAH | 50 | 16 |
| 25 | 17COS108 | B.MOHANAGAYATHRI | 60 | 18 |
| 26 | 17COS109 | V.NAMAN TIKMANY | 60 | 18 |
| 27 | 17COS110 | M.PRAVEEN KUMAR | 60 | 20 |
| 28 | 17COS111 | S.PRIYADHARSHINI | 55 | 21 |
| 29 | 17COS112 | P.PUGALENTHI | 55 | 15 |
| 30 | 17COS113 | SRM.RAMJI NATTH | 60 | 20 |
| 31 | 17COS114 | M.RAMYA | 65 | 20 |
| 32 | 17COS115 | R.REVATHY | 45 | 15 |
| 33 | 17COS116 | M.SABARISH PANDIAN | 60 | 20 |
| 34 | 17COS117 | M.SAI PRASATH | 60 | 20 |
| 35 | 17COS118 | M.SAKTHI KUMAR | 40 | 20 |
| 36 | 17COS119 | S.SANDHOSH | 50 | 18 |
| 37 | 17COS120 | Mr.Santhosh M | 57 | 22 |
| 38 | 17COS121 | S.SHAHILA PARVEEN | 50 | 18 |
| 39 | 17COS122 | S.SHELTON BERG | 50 | 20 |
| 40 | 17COS123 | J.SIDDARTHAN | 60 | 12 |
| 41 | 17COS124 | K.SIVAKUMAR | 55 | 20 |
| 42 | 17COS125 | R.SOMA SUNDARAM | 45 | 20 |
| 43 | 17COS126 | R.S.SREERAM | 64 | 20 |
| 44 | 17COS127 | R.SRINATH | 45 | 15 |
| 45 | 17COS128 | N.SUNDARESWARAR | 50 | 15 |
| 46 | 17COS129 | E.SURESH | 48 | 21 |

| | | | | |
|---|---|---|---|---|
| 47 | 17COS130 | P.G.SURYA | 52 | 18 |
| 48 | 17COS132 | S.UMABHARATHI | 57 | 19 |
| 49 | 17COS133 | K.VASANTH KUMAR | 55 | 20 |
| 50 | 17COS134 | M.VEERAPUTHRAN | 45 | 20 |
| 51 | 17COS135 | B.VIGNESH | 55 | 14 |
| 52 | 17COS136 | M.VIGNESHWARI | 45 | 17 |
| 53 | 17COS137 | A.VIJIPANDIAMMAL | 55 | 17 |
| 54 | 17COS138 | K.VIMAL KUMAR | 50 | 20 |
| 55 | 17COS139 | E.YOGAVIGNESH | 60 | 20 |
| 56 | 17COS140 | P.KARTHICK | 60 | 28 |
| 57 | 17COS141 | KR.RAHUL | 50 | 15 |
| 58 | 17COS143 | N.MOHAN DASS | 40 | 20 |
| 59 | 17COS145 | S.SANTHANA KARUPPU | 45 | 15 |

**Head of the Department**

Head of the Department
Department of Computer Science
The American College
Madurai-625002

## COS 3683 (A) – PROJECT DEVELOPMENT LAB – NOVEMBER 2019 - 2020

| S.NO | ROLLNUMBER | NAME | INTERNAL 75 | EXTERNAL 25 |
|---|---|---|---|---|
| 1 | 17COS01 | S.AFFRIN SHEFANA | 40 | 10 |
| 2 | 17COS03 | A.ANTONY ARUN KUMAR | 40 | 10 |
| 3 | 17COS04 | N.P.ARAVIND | 30 | 15 |
| 4 | 17COS05 | S.ARSATH IBRAS | 30 | 15 |
| 5 | 17COS06 | Z.ASLAM SUZA | 30 | 15 |
| 6 | 17COS07 | A.BALA VASAGAN | 25 | 15 |
| 7 | 17COS08 | V.BALACHANDRAN | 50 | 15 |
| 8 | 17COS09 | D.BALAJI | 50 | 20 |
| 9 | 17COS10 | D.V.BENSON ANTONY | 55 | 20 |
| 10 | 17COS11 | R.BHARATH | 60 | 20 |
| 11 | 17COS12 | A.CAMBRIDEGE BALIN | 30 | 15 |
| 12 | 17COS14 | R.CHARLES IMMANUEL RAJ | 50 | 20 |
| 13 | 17COS15 | R.DANIELL JOHN | 70 | 24 |
| 14 | 17COS16 | R.J.DEVADHARSAN | 30 | 10 |
| 15 | 17COS18 | A.DINESH KUMAR | 60 | 15 |
| 16 | 17COS19 | ESSAC ROBIN | 30 | 12 |
| 17 | 17COS20 | F.FRANCIS PRABHAKAR | 30 | 10 |
| 18 | 17COS21 | B.GOBIKA | 65 | 21 |
| 19 | 17COS22 | M.GOKUL | 30 | 15 |
| 20 | 17COS23 | S.GOWSIKAN | 30 | 20 |
| 21 | 17COS24 | J.GUHAN | 30 | 20 |
| 22 | 17COS25 | S.HARIHARAN | 60 | 23 |

| | | | | |
|---|---|---|---|---|
| 23 | 17COS26 | T.HARIHARAN | 40 | 15 |
| 24 | 17COS27 | R.HARINI DEVI | 30 | 20 |
| 25 | 17COS28 | J.JACOB ANTONY | 30 | 20 |
| 26 | 17COS29 | H.JEFFRY JAMES | 60 | 20 |
| 27 | 17COS30 | M.JOEL KEVIN | 65 | 20 |
| 28 | 17COS32 | J.JOTHAM REX | 40 | 20 |
| 29 | 17COS33 | R.KALEESHWARAN | 20 | 5 |
| 30 | 17COS34 | A.KARPAGAM | 55 | 22 |
| 31 | 17COS35 | P.KARTHIKEYAN | 30 | 15 |
| 32 | 17COS36 | S.KEERITHIKA | 35 | 15 |
| 33 | 17COS37 | N.KISHORE | 50 | 20 |
| 34 | 17COS38 | SB.LAKSHMAN RAJ | 62 | 20 |
| 35 | 17COS39 | B.LAXMAN | 35 | 20 |
| 36 | 17COS41 | S.MANOJ VASAN | 30 | 10 |
| 37 | 17COS42 | M.MOHAMED ABUBUCKER SIDDIQ | 40 | 12 |
| 38 | 17COS43 | A.MOHAMMED ISMAIL | 20 | 5 |
| 39 | 17COS44 | S.MOHANKUMAR | 65 | 15 |
| 40 | 17COS45 | R.MUGESH | 45 | 15 |
| 41 | 17COS46 | P.PARIMALA DEVI | 45 | 15 |
| 42 | 17COS47 | P.POOVARASAN | 60 | 25 |
| 43 | 17COS48 | V.PRASANNA | 50 | 15 |
| 44 | 17COS49 | D.PRAVEEN RAJ | 45 | 15 |
| 45 | 17COS50 | M.RAHUL RAJ | 40 | 12 |
| 46 | 17COS51 | M.RAJA SRIDHAR | 55 | 20 |

| | | | | |
|---|---|---|---|---|
| 47 | 17COS52 | V.RAJESH | 40 | 20 |
| 48 | 17COS53 | S.ROHAN BABU | 52 | 18 |
| 49 | 17COS54 | I.B.ROSHAN ABISHEIK RAAJ | 40 | 15 |
| 50 | 17COS55 | S.SAKTHIVEL | 45 | 15 |
| 51 | 17COS56 | S.SANTHOSH | 40 | 18 |
| 52 | 17COS57 | J.SARAVANAN | 35 | 15 |
| 53 | 17COS58 | M.SASI KUMAR | 40 | 22 |
| 54 | 17COS59 | M.SHARAN KUMAR | 40 | 15 |
| 55 | 17COS61 | S.SIVASANGARI | 41 | 21 |
| 56 | 17COS65 | J.THOMAS JEFFERSON DANIEL | 55 | 20 |
| 57 | 17COS66 | J.TOM ANTONY AGASSI | 30 | 10 |
| 58 | 17COS67 | K.VAIRAM | 40 | 15 |
| 59 | 17COS68 | R.VARSHA | 40 | 20 |
| 60 | 17COS69 | S.VELANGANNI AROCKIA DOSS | 35 | 13 |
| 61 | 17COS70 | M.VENKATA NARAYANAN | 55 | 20 |
| 62 | 17COS71 | P.VIGNESHWARAN | 50 | 10 |
| 63 | 17COS72 | P.VISHNUKUMAR | 30 | 10 |
| 64 | 17COS73 | B.J.VISHWA PRASAD | 50 | 15 |
| 65 | 17COS74 | M.YOGESHWARAN | 30 | 10 |
| 66 | 17COS75 | M.S.YUKESH | 30 | 15 |

Head of the Department

Head of the Department
Department of Computer Science
The American College
Madurai-625002

## COS 3683 (B) – PROJECT DEVELOPMENT LAB - NOVEMBER 2019 - 2020

| S.NO | ROLLNUMBER | NAME | INTERNAL 75 | EXTERNAL 25 |
|---|---|---|---|---|
| 1 | 17COS77 | M.ABHISHEK | 40 | 10 |
| 2 | 17COS78 | M.ALAGAR | 50 | 15 |
| 3 | 17COS80 | G.ARUN PANDIAN | 50 | 15 |
| 4 | 17COS81 | T.R.ARUNKUMAR | 55 | 15 |
| 5 | 17COS82 | V.AYYANG KALAI | 50 | 20 |
| 6 | 17COS83 | R.BABURAJ | 55 | 20 |
| 7 | 17COS84 | R.BALAJI | 50 | 20 |
| 8 | 17COS85 | U.CALEB DANIEL | 50 | 18 |
| 9 | 17COS86 | S.M.DEEPAK | 55 | 20 |
| 10 | 17COS87 | R.DEEPAK GOWTHAM | 30 | 15 |
| 11 | 17COS89 | J.DINESH | 30 | 10 |
| 12 | 17COS90 | J.GEO | 50 | 20 |
| 13 | 17COS92 | R.HARI RAM PRASATH | 55 | 20 |
| 14 | 17COS93 | A.ISHWARIYA LAKSHMI | 60 | 10 |
| 15 | 17COS94 | A.JAMES KANSTAN ROY | 50 | 15 |
| 16 | 17COS95 | T.JEEVA | 50 | 18 |
| 17 | 17COS97 | B.JOTHIPANDI | 50 | 10 |
| 18 | 17COS99 | Mr.KALESH M | 25 | 15 |
| 19 | 17COS100 | .MM.K.LAKSHMANAN BABU | 50 | 15 |
| 20 | 17COS101 | J.LAKSHUMANA PERUMAL | 50 | 20 |
| 21 | 17COS102 | J.LOORDHU | 40 | 15 |

| | | | | |
|---|---|---|---|---|
| | | SOUNDARYA | | |
| 22 | 17COS104 | N.MANOJ | 40 | 15 |
| 23 | 17COS106 | S.MOHAMED ABDULLAH | 40 | 20 |
| 24 | 17COS108 | B.MOHANAGAYATHRI | 60 | 15 |
| 25 | 17COS109 | V.NAMAN TIKMANY | 55 | 15 |
| 26 | 17COS110 | M.PRAVEEN KUMAR | 52 | 20 |
| 27 | 17COS111 | S.PRIYADHARSHINI | 60 | 12 |
| 28 | 17COS112 | P.PUGALENTHI | 65 | 15 |
| 29 | 17COS113 | SRM.RAMJI NATTH | 55 | 20 |
| 30 | 17COS114 | M.RAMYA | 40 | 20 |
| 31 | 17COS115 | R.REVATHY | 35 | 15 |
| 32 | 17COS116 | M.SABARISH PANDIAN | 30 | 40 |
| 33 | 17COS117 | M.SAI PRASATH | 50 | 15 |
| 34 | 17COS118 | M.SAKTHI KUMAR | 55 | 15 |
| 35 | 17COS119 | S.SANDHOSH | 60 | 22 |
| 36 | 17COS120 | Mr.Santhosh M | 38 | 12 |
| 37 | 17COS121 | S.SHAHILA PARVEEN | 45 | 23 |
| 38 | 17COS122 | S.SHELTON BERG | 50 | 12 |
| 39 | 17COS123 | J.SIDDARTHAN | 55 | 10 |
| 40 | 17COS124 | K.SIVAKUMAR | 55 | 13 |
| 41 | 17COS125 | R.SOMA SUNDARAM | 30 | 10 |
| 42 | 17COS126 | R.S.SREERAM | 50 | 20 |
| 43 | 17COS127 | R.SRINATH | 30 | 16 |
| 44 | 17COS128 | N.SUNDARESWARAR | 50 | 15 |

| | | | | |
|---|---|---|---|---|
| 45 | 17COS129 | E.SURESH | 40 | 12 |
| 46 | 17COS130 | P.G.SURYA | 60 | 15 |
| 47 | 17COS132 | S.UMABHARATHI | 50 | 10 |
| 48 | 17COS133 | K.VASANTH KUMAR | 60 | 12 |
| 49 | 17COS134 | M.VEERAPUTHRAN | 50 | 17 |
| 50 | 17COS135 | B.VIGNESH | 60 | 18 |
| 51 | 17COS136 | M.VIGNESHWARI | 50 | 20 |
| 52 | 17COS137 | A.VIJIPANDIAMMAL | 40 | 20 |
| 53 | 17COS138 | K.VIMAL KUMAR | 50 | 20 |
| 54 | 17COS139 | E.YOGAVIGNESH | 55 | 20 |
| 55 | 17COS140 | P.KARTHICK | 40 | 15 |
| 56 | 17COS141 | KR.RAHUL | 50 | 10 |
| 57 | 17COS143 | N.MOHAN DASS | 31 | 17 |
| 58 | 17COS145 | S.SANTHANA KARUPPU | 40 | 15 |

Head of the Department

Head of the Department
Department of Computer Science
The American College
Madurai-625002

# GROWTH OF TEXTILE INDUSTRY IN TAMIL NADU

A Project Report Submitted in Partial Fulfillment of the Requirement for the Award of Degree of the

## MASTER OF ARTS IN ECONOMICS

**A.SEENIVASAN**
**(18PEC11)**

Under the Guidance and Supervision of
**Dr. S. VANITHA M.Sc., Ph.D.,**

**POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**
**THE AMERICAN COLLEGE**
**(An Autonomous Institution, Affiliated to Madurai Kamaraj University Reaccredited (2nd Cycle) by NAAC with Grade "A" CGPA -3.46 on a 4 point scale)**
**Madurai – 625 002**

**April 2020**

**Dr. S. VANITHA M.Sc., Ph.D.,**
Assistant Professor in Economics
Post Graduate and Research Department of Economics
The American College (Autonomous)
Madurai- 625 002

# CERTIFICATE

This is to certify that the project titled on **"GROWTH OF TEXTILE INDUSTRY IN TAMIL NADU"** submitted in partial fulfillment of the requirement for the Master of Arts to The American College is a record of bonafide research work carried out by **A.SEENIVASAN (18PEC11)** under my guidance and supervision and that no part of this project report has been submitted for the award of any other degree or diploma of this college or any other university.

Place: Madurai
Date:

**(Dr. S. VANITHA)**
**Signature of the Guide**

Certified

**Dr. C. MUTHURAJA, M.A., M.Phil, C.D.J., Ph.D.,**
Head & Associate Professor
Post Graduate and research Department of Economics
The American College (Autonomous)
Madurai- 625 002

Dr. C. Muthuraja, Ph.D
Head & Associate Professor
PG & Research Department of Economics
The American College
Madurai - 625 002, TN, India

# DECLINE OF WOMEN LABOUR FORCE IN INDIA-IT'S CHALLENGES

A Project Report submitted in partial fulfillment of the requirements for
The Award of degree of the

## MASTER OF ARTS IN ECONOMICS

By

**B. SOBANADEVI**
**(18 PEC 22)**

Under the Guidance and Supervision of

**Dr. R. JASMINE., M.A., M.Phil., Ph.D.,**

**POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**
**THE AMERICAN COLLEGE**
**(An Autonomous Institution Affiliated to Madurai Kamaraj University**
**Reaccredited (2nd Cycle) by NAAC with Grade "A" CGPA- 3.46 on a 4 point scale**
**MADURAI – 625 002**

**APRIL 2020**

**Dr. R. JASMINE., M.A., M.Phil., Ph.D**
Assistant Professor in Economics,
Post Graduate & Research Department of Economics,
The American College,
Madurai – 625002.

# CERTIFICATE

This is to certify that the project entitled "**DECLINE OF WOMEN LABOUR FORCE IN INDIA-IT'S CHALLENGES**" is a bonafied record of work done by Ms. B. SOBANADEVI (18 PEC 22) in Post Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICS under my guidance and supervision during the year 2019 – 2020.

Date:

Place:

R. Jas

(R. JASMINE)

**Certified**

**Dr .C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head of the Department,
Post-Graduate & Research Department of Economics,
The American College,
Madurai-625 002.

Dr. C. Muthuraja, Ph.D
Head & Associate Professor
PG & Research Department of Economics
The American College
Madurai - 625 002, TN, India

**A.SEENIVASAN**
**(18PEC11)**
Post Graduate & Research Department of Economics
The American College (Autonomous)
Madurai – 625 002

## DECLARATION

We hereby declare that the project entitled "**GROWTH OF TEXTILE INDUSTRY IN TAMIL NADU" .** Submitted for the degree of Master of Arts is my original work under the guidance **Dr. S. VANITHA,** Assistant Professor, Post Graduate & Research Department of Economics, The American College, Madurai and no part of this project has been submitted for the award of any other Degree, Diploma, Fellowship or other similar title of any other university or board.

Place: Madurai
Date:

**(A.SEENIVASAN)**
Signature of the Candidate

# A STUDY ON PRODUCTION AND MARKETING OF MILK IN ALATHUR VILLAGE OF MADURAI DISTRICT

A Project Report Submitted in Partial Fulfillment of the Requirements for the Award of Degree of

## MASTER OF ARTS IN ECONOMICS


M. KARUPPASAMY
(18 PEC 05)


Under the Guidance and Supervision of

Mr. S.T. JACOB PONRAJ MA., M.Phil., B.Ed.,


POST-GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

THE AMERICAN COLLEGE

**(An Autonomous Institution Affiliated to Madurai Kamaraj University)**
**Reaccredited (2nd Cycle) by NAAC with Grade "A" CGPA 3.46 on a 4 point scale**

MADURAI 625 002


APRIL 2020

**B. SOBANADEVI,**
**(18PEC22)**
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625002.

# DECLARATION

I hereby declare that the project entitled**"DECLINE OF WOMEN LABOUR FORCE IN INDIA-IT'S CHALLENGES"** submitted toPost Graduate Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of arts in Economicsis a record of the original work done by me under the guidance and supervision ofDr. R. JASMINE, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place :

Date :

**(B. SOBANADEVI)**

**M. KARUPPASAMY**
**(18 PEC 05)**
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625002.

# DELCLARATION

I hereby declare that the project entitled **"A STUDY ON PRODUCTION AND MARKETING OF MILK IN ALATHUR VILLAGE OF MADURAI DISTRICT"** submitted to Post-Graduate and Research Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of Arts in Economics is a record of the original work done by me under the guidance and supervision of **Mr. S.T. JACOB PONRAJ**, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place: Madurai

Date:

M. Karuppasamy.

**(M. KARUPPASAMY)**

**Mr. S.T. JACOB PONRAJ M.A., M.Phil., B.Ed.,**
Assistant Professor in Economics,
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625 002.

# CERTIFICATE

This is to certify that the project entitled "**A STUDY ON PRODUCTION AND MARKETING OF MILK IN ALATHUR VILLAGE OF MADURAI DISTRICT**" is a bonafide record of work done by Mr. **M. KARUPPASAMY** (18 PEC 05) in Post-Graduate and Research Department of Economics, The American College, Madurai for the partial fulfillment of the requirement of the Degree of Master of Arts in Economics under my guidance and supervision during the year 2019-20.

Date:

Place: Madurai

**(S.T. JACOB PONRAJ)**

**Certified**

**Dr. C. MUTHURAJA, M.A., M. Phil., C.D.J., Ph.D.,**
Head & Associate Professor
Post-Graduate & Research Department of Economics
The American College
Madurai 625 002

Dr. C. Muthuraja, M.A., M.Phil., C.D.J., Ph.D.
Head & Associate Professor
PG & Research Department of Economics
The American College
Madurai - 625 002, TN, India

# A STUDY ON THE HOUSEHOLD ELECTRICITY CONSUMPTION PATTERN IN KARUPPATTI VILLAGE OF VADIPATTI TALUK

A Project Report submitted in partial fulfillment of the requirements for
The Award of degree of the

**MASTER OF ARTS IN ECONOMICS**

By

**R. SATHEESH KUMAR**
**(18 PEC 10)**

Under the Guidance and Supervision of

**Dr. T. SELVAKUMAR, M.A.,M.Phil., SET., Ph.D.**

**POST GRADUATE AND CRESEARCH DEPARTMENT OF ECONOMICS**
**THE AMERICAN COLLEGE**
**(An Autonomous Institution Affiliated to Madurai Kamaraj University**
**Reaccredited (2nd Cycle) by NAAC with Grade "A" CGPA- 3.46 on a 4 point scale**
**MADURAI – 625 002**

**APRIL 2020**

**Dr. T. SELVAKUMAR,M.A.,M.Phil., SET., Ph.D.**
Assistant Professor in Economics,
Post Graduate & Research Department of Economics,
The American College,
Madurai – 625002.

# CERTIFICATE

This is to certify that the project entitled **"A STUDY ON THE HOUSEHOLD ELECTRICITY CONSUMPTION PATTERN IN KARUPPATTI VILLAGE OF VADIPATTI TALUK"**is a bonafied record of work done byMr.R.SATHEESHKUMAR (18 PEC 10)in Post Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICS under my guidance and supervision during the year 2019 – 2020.

Date:

Place:

(T. SELVAKUMAR)

**Certified**

**Dr .C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head of the Department,
Post-Graduate & Research Department of Economics,
The American College,
Madurai-625 002.

Dr. C. Muthuraja, Ph.D
Head & Associate Professor
PG & Research Department of Economics
The American College
Madurai - 625 002, TN, India

# A STUDY OF JOB SATISFACTION OF WOMEN EMPLOYEES IN PUBLIC AND PRIVATE SECTOR BANKS IN MADURAI CITY

A Project Report Submitted in Partial Fulfillment of the Requirements for the Award of Degree of

**MASTER OF ARTS IN ECONOMICS**

By

**M. SEENIVASAN**
**(18PEC12)**

Under the Guidance and Supervision of

**Dr.M. SHEELA , M.A., M.Phil., Ph.D**

**POST-GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**

**THE AMERICAN COLLEGE**

**(An Autonomous Institution Affiliated to Madurai Kamaraj University)**
**Reaccredited (2nd Cycle) by NAAC with Grade "A" CGPA3.46 on a 4 point scale**
**MADURAI625 002**

**APRIL2020**

**R.SATHEESHKUMAR,**
**(18PEC10)**
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625002.

# DECLARATION

I hereby declare that the project entitled**"A STUDY ON THE HOUSEHOLD ELECTRICITY CONSUMPTION PATTERN IN KARUPPATTI VILLAGE OF VADIPATTI TALUK"**submitted toPost Graduate Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of arts in Economicsis a record of the original work done by me under the guidance and supervision ofDr. T. SELVAKUMAR, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place :

Date :

**(R.SATHEESHKUMAR)**

# AN ECONOMIC ANALYSIS OF POLICY HOLDERS IN THE DIRECTION OF LIFE INSURANCE POLICY IN ARUPPUKOTTAI TALUK

A Project Report submitted in partial fulfillment of the requirements for
The Award of degree of the

**MASTER OF ARTS IN ECONOMICS**

By

**N.VIJAYAKUMAR**
**(18 PEC 16)**

Under the Guidance and Supervision of

**M. YESURAJAN., M.Sc., M.Phil.,**

**POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**
**THE AMERICAN COLLEGE**
**(An Autonomous Institution Affiliated to Madurai Kamaraj University**
**Reaccredited (2nd Cycle) by NAAC with Grade "A" CGPA- 3.46 on a 4 point scale**
**MADURAI – 625 002**

**APRIL 2020**

**Dr.M. SHEELA ,M.A., M.Phil.,Ph.D**
Assistant Professor in Economics
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625002.

# CERTIFICATE

This is to certify that the project entitled **"A STUDY OF JOB SATISFACTION OF WOMEN EMPLOYEES IN PUBLIC AND PRIVATE SECTOR BANKS IN MADURAI CITY"**is a bonafied record of work done by **Mr. M. SEENIVASAN (18 PEC12)**in Post-Graduate and Research Department of Economics, The American College, Madurai for the partial fulfillment of the requirement of the Degree of Master of Arts in Economics under my guidance and supervision during the year 2019-20.

**(M.SHEELA)**
Assistant Professor

Place:
Date:

**Certified**

**Dr.C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head & Associate Professor
Post-Graduate & Research Department of Economics
The American College
Madurai625 002

Dr. C. Muthuraja, Ph.D
Head & Associate Professor
P.G. & Research Department of Economics
The American College
Madurai - 625 002, TN, India

M.SEENIVASAN
(18PEC12)
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625002.

# DECLARATION

I hereby declare that the project entitled **"A STUDY OF JOB SATISFACTION OF WOMEN EMPLOYEES IN PUBLIC AND PRIVATE SECTOR BANKS IN MADURAI CITY"** submitted to Post-Graduate and Research Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of Arts in Economics is a record of the original work done by me under the guidance and supervision of **Dr.M.SHEELA**, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place: Madurai

Date:

M Seeni

**(M.SEENIVASAN)**

**M. YESURAJAN., M.Sc., M.Phil.,**
Assistant Professor in Economics,
Post Graduate & Research Department of Economics,
The American College,
Madurai – 625 002.

# CERTIFICATE

This is to certify that the project entitled **"AN ECONOMIC ANALYSIS OF POLICY HOLDERS IN THE DIRECTION OF LIFE INSURANCE POLICY IN ARUPPUKOTTAI TALUK"** is a bonafied record of work done by Mr. N. VIJAYAKUMAR (18 PEC 16) in Post Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICS under my guidance and supervision during the year 2019 – 2020.

Date:

Place:

M.Yesu

(M.YESURAJAN)

**Certified**

**Dr .C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head of the Department,
Post-Graduate & Research Department of Economics,
The American College,
Madurai-625 002.

Dr. C. Muthuraja,
Head & Associate Professor
P.G. & Research Department of Economics
The American College
Madurai - 625 002, TN, India

**N.VIJAYAKUMAR,**
**(18PEC16)**
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625002.

# DECLARATION

I hereby declare that the project entitled **"AN ECONOMIC ANALYSIS OF POLICY HOLDERS IN THE DIRECTION OF LIFE INSURANCE POLICY IN ARUPPUKOTTAI TALUK"** submitted to Post Graduate Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of arts in Economics is a record of the original work done by me under the guidance and supervision of Mr. M. YESURAJAN , Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place :

Date :

**(N.VIJAYAKUMAR)**

**Dr. R. MURUGAN., M.A., M.Phil., Ph.D.,**
Assistant Professor in Economics,
Post Graduate & Research Department of Economics,
The American College,
Madurai – 625002.

# CERTIFICATE

This is to certify that the project entitled "**SOCIO-ECONOMIC STATUS OF SELF HELP GROUP MEMBERS IN PALAVANATHAM VILLAGE, VIRUDHUNAGAR DISTRICT**" is a bonafied record of work done byMs. K. PALANI SELVI (18 PEC 20) in Post Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICS under my guidance and supervision during the year 2019 – 2020.

Date:

Place:

R. MUR.
(R. MURUGAN)

**Certified**

**Dr .C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head of the Department,
Post-Graduate & Research Department of Economics,
The American College,
Madurai-625 002.

Dr. C. Muthuraja, M.A., M.Phil., C.D.J., Ph.D.
Head & Associate Professor
PG & Research Department of Economics
The American College
Madurai - 625 002, TN, India

**K.PALANI SELVI,**
**(18PEC20)**
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625002.

# DECLARATION

I hereby declare that the project entitled**"SOCIO-ECONOMIC STATUS OF SELF HELP GROUP MEMBERS IN PALAVANATHAM VILLAGE, VIRUDHUNAGAR DISTRICT"** submitted toPost Graduate Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of arts in Economicsis a record of the original work done by me under the guidance and supervision ofDr. R. MURUGAN, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place :

Date :

K. Palani Selvi

**(K. PALANI SELVI)**

# GROWTH OF TEXTILE INDUSTRY IN TAMIL NADU

A Project Report Submitted in Partial Fulfillment of the Requirement for the Award of Degree of the

## MASTER OF ARTS IN ECONOMICS

**A.SEENIVASAN**
**(18PEC11)**

Under the Guidance and Supervision of
**Dr. S. VANITHA M.Sc., Ph.D.,**

**POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**
**THE AMERICAN COLLEGE**
**(An Autonomous Institution, Affiliated to Madurai Kamaraj University Reaccredited (2nd Cycle) by NAAC with Grade "A" CGPA -3.46 on a 4 point scale)**
**Madurai – 625 002**

**April 2020**

**A.SEENIVASAN**
**(18PEC11)**
Post Graduate & Research Department of Economics
The American College (Autonomous)
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## DECLARATION

We hereby declare that the project entitled "**GROWTH OF TEXTILE INDUSTRY IN TAMIL NADU" .** Submitted for the degree of Master of Arts is my original work under the guidance **Dr. S. VANITHA,** Assistant Professor, Post Graduate & Research Department of Economics, The American College, Madurai and no part of this project has been submitted for the award of any other Degree, Diploma, Fellowship or other similar title of any other university or board.

Place: Madurai
Date:

**(A.SEENIVASAN)**
Signature of the Candidate

**Dr. S. VANITHA M.Sc., Ph.D.,**
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Madurai- 625 002

# CERTIFICATE

This is to certify that the project titled on **"GROWTH OF TEXTILE INDUSTRY IN TAMIL NADU"** submitted in partial fulfillment of the requirement for the Master of Arts to The American College is a record of bonafide research work carried out by **A.SEENIVASAN (18PEC11)** under my guidance and supervision and that no part of this project report has been submitted for the award of any other degree or diploma of this college or any other university.

Place: Madurai
Date:

**(Dr. S. VANITHA)**
**Signature of the Guide**

Certified

**Dr. C. MUTHURAJA, M.A., M.Phil, C.D.J., Ph.D.,**
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Dr. C. Muthuraja, Ph.D
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Madurai - 625 002, TN, India

# DECLINE OF WOMEN LABOUR FORCE IN INDIA-IT'S CHALLENGES

A Project Report submitted in partial fulfillment of the requirements for
The Award of degree of the

## MASTER OF ARTS IN ECONOMICS

By

**B. SOBANADEVI**
**(18 PEC 22)**

Under the Guidance and Supervision of

**Dr. R. JASMINE., M.A., M.Phil., Ph.D.,**

**POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**
**THE AMERICAN COLLEGE**
**(An Autonomous Institution Affiliated to Madurai Kamaraj University**
**Reaccredited (2nd Cycle) by NAAC with Grade "A" CGPA- 3.46 on a 4 point scale**
**MADURAI – 625 002**

**APRIL 2020**

**Dr. R. JASMINE., M.A., M.Phil., Ph.D**
Assistant Professor in Economics,
Post Graduate & Research Department of Economics,
The American College,
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# CERTIFICATE

This is to certify that the project entitled "**DECLINE OF WOMEN LABOUR FORCE IN INDIA-IT'S CHALLENGES**" is a bonafied record of work done by Ms. B. SOBANADEVI (18 PEC 22) in Post Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICS under my guidance and supervision during the year 2019 – 2020.

Date:

Place:

R. Jas

(R. JASMINE)

**Certified**

**Dr .C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head of the Department,
Post-Graduate & Research Department of Economics,
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**B. SOBANADEVI,**
**(18PEC22)**
Post-Graduate & Research Department of Economics,
The American College,
Madurai 625002.

# DECLARATION

I hereby declare that the project entitled**"DECLINE OF WOMEN LABOUR FORCE IN INDIA-IT'S CHALLENGES"** submitted toPost Graduate Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of arts in Economicsis a record of the original work done by me under the guidance and supervision ofDr. R. JASMINE, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place :

Date :

**(B. SOBANADEVI)**

# A STUDY ON THE HOUSEHOLD ELECTRICITY CONSUMPTION PATTERN IN KARUPPATTI VILLAGE OF VADIPATTI TALUK

A Project Report submitted in partial fulfillment of the requirements for
The Award of degree of the

**MASTER OF ARTS IN ECONOMICS**

By

**R. SATHEESH KUMAR**
**(18 PEC 10)**

Under the Guidance and Supervision of

**Dr. T. SELVAKUMAR, M.A.,M.Phil., SET., Ph.D.**

**POST GRADUATE AND CRESEARCH DEPARTMENT OF ECONOMICS**
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**(An Autonomous Institution Affiliated to Madurai Kamaraj University**
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**APRIL 2020**

**R.SATHEESHKUMAR,**
**(18PEC10)**
Post-Graduate & Research Department of Economics,
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Madurai 625002.

# DECLARATION

I hereby declare that the project entitled**"A STUDY ON THE HOUSEHOLD ELECTRICITY CONSUMPTION PATTERN IN KARUPPATTI VILLAGE OF VADIPATTI TALUK"**submitted toPost Graduate Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of arts in Economicsis a record of the original work done by me under the guidance and supervision ofDr. T. SELVAKUMAR, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place :

Date :

**(R.SATHEESHKUMAR)**

**Dr. T. SELVAKUMAR,M.A.,M.Phil., SET., Ph.D.**
Assistant Professor in Economics,
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The American College,
Madurai – 625002.

# CERTIFICATE

This is to certify that the project entitled **"A STUDY ON THE HOUSEHOLD ELECTRICITY CONSUMPTION PATTERN IN KARUPPATTI VILLAGE OF VADIPATTI TALUK"**is a bonafied record of work done byMr.R.SATHEESHKUMAR (18 PEC 10)in Post Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICS under my guidance and supervision during the year 2019 – 2020.

Date:

Place:

(T. SELVAKUMAR)

**Certified**

**Dr .C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head of the Department,
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Madurai - 625 002, TN, India

# A STUDY OF JOB SATISFACTION OF WOMEN EMPLOYEES IN PUBLIC AND PRIVATE SECTOR BANKS IN MADURAI CITY

A Project Report Submitted in Partial Fulfillment of the Requirements for the Award of Degree of

**MASTER OF ARTS IN ECONOMICS**

By

**M. SEENIVASAN**
**(18PEC12)**

Under the Guidance and Supervision of

**Dr.M. SHEELA , M.A., M.Phil., Ph.D**

**POST-GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**

**THE AMERICAN COLLEGE**

**(An Autonomous Institution Affiliated to Madurai Kamaraj University)**
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**APRIL2020**

**Dr.M. SHEELA ,M.A., M.Phil.,Ph.D**
Assistant Professor in Economics
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# CERTIFICATE

This is to certify that the project entitled **"A STUDY OF JOB SATISFACTION OF WOMEN EMPLOYEES IN PUBLIC AND PRIVATE SECTOR BANKS IN MADURAI CITY"**is a bonafied record of work done by **Mr. M. SEENIVASAN (18 PEC12)**in Post-Graduate and Research Department of Economics, The American College, Madurai for the partial fulfillment of the requirement of the Degree of Master of Arts in Economics under my guidance and supervision during the year 2019-20.

**(M.SHEELA)**
Assistant Professor

Place:
Date:

**Certified**

**Dr.C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head & Associate Professor
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Madurai625 002

Dr. C. Muthuraja, Ph.D
Head & Associate Professor
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M.SEENIVASAN
(18PEC12)
Post-Graduate & Research Department of Economics,
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Madurai 625002.

# DECLARATION

I hereby declare that the project entitled **"A STUDY OF JOB SATISFACTION OF WOMEN EMPLOYEES IN PUBLIC AND PRIVATE SECTOR BANKS IN MADURAI CITY"** submitted to Post-Graduate and Research Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of Arts in Economics is a record of the original work done by me under the guidance and supervision of **Dr.M.SHEELA**, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place: Madurai

Date:

M Seeni

**(M.SEENIVASAN)**

# AN ECONOMIC ANALYSIS OF POLICY HOLDERS IN THE DIRECTION OF LIFE INSURANCE POLICY IN ARUPPUKOTTAI TALUK

A Project Report submitted in partial fulfillment of the requirements for
The Award of degree of the

**MASTER OF ARTS IN ECONOMICS**

By

**N.VIJAYAKUMAR**
**(18 PEC 16)**

Under the Guidance and Supervision of

**M. YESURAJAN., M.Sc., M.Phil.,**

**POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**
**THE AMERICAN COLLEGE**
**(An Autonomous Institution Affiliated to Madurai Kamaraj University**
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**MADURAI – 625 002**

**APRIL 2020**

**M. YESURAJAN., M.Sc., M.Phil.,**
Assistant Professor in Economics,
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Madurai – 625 002.

# CERTIFICATE

This is to certify that the project entitled **"AN ECONOMIC ANALYSIS OF POLICY HOLDERS IN THE DIRECTION OF LIFE INSURANCE POLICY IN ARUPPUKOTTAI TALUK"** is a bonafied record of work done by Mr. N. VIJAYAKUMAR (18 PEC 16) in Post Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICS under my guidance and supervision during the year 2019 – 2020.

Date:

Place:

M.Yesu

(M.YESURAJAN)

**Certified**

**Dr .C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
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**N.VIJAYAKUMAR,**
**(18PEC16)**
Post-Graduate & Research Department of Economics,
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# DECLARATION

I hereby declare that the project entitled **"AN ECONOMIC ANALYSIS OF POLICY HOLDERS IN THE DIRECTION OF LIFE INSURANCE POLICY IN ARUPPUKOTTAI TALUK"** submitted to Post Graduate Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of arts in Economics is a record of the original work done by me under the guidance and supervision of Mr. M. YESURAJAN , Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place :

Date :

**(N.VIJAYAKUMAR)**

# SOCIO-ECONOMIC STATUS OF SELF HELP GROUP MEMBERS IN PALAVANATHAM VILLAGE, VIRUDHUNAGAR DISTRICT

A Project Report submitted in partial fulfillment of the requirements for
The Award of degree of the

**MASTER OF ARTS IN ECONOMICS**

By

**K. PALANI SELVI**
**(18 PEC 20)**

Under the Guidance and Supervision of

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**APRIL 2020**

**K.PALANI SELVI,**
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Madurai 625002.

# DECLARATION

I hereby declare that the project entitled**"SOCIO-ECONOMIC STATUS OF SELF HELP GROUP MEMBERS IN PALAVANATHAM VILLAGE, VIRUDHUNAGAR DISTRICT"** submitted toPost Graduate Department of Economics, The American College in the partial fulfillment of the requirement for the award of the Degree of Master of arts in Economicsis a record of the original work done by me under the guidance and supervision ofDr. R. MURUGAN, Assistant Professor, Post-Graduate and Research Department of Economics, The American College, Madurai.

Place :

Date :

K. Palani Selvi

**(K. PALANI SELVI)**

**Dr. R. MURUGAN., M.A., M.Phil., Ph.D.,**
Assistant Professor in Economics,
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Madurai – 625002.

# CERTIFICATE

This is to certify that the project entitled "**SOCIO-ECONOMIC STATUS OF SELF HELP GROUP MEMBERS IN PALAVANATHAM VILLAGE, VIRUDHUNAGAR DISTRICT**" is a bonafied record of work done byMs. K. PALANI SELVI (18 PEC 20) in Post Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICS under my guidance and supervision during the year 2019 – 2020.

Date:

Place:

R. MUR.
(R. MURUGAN)

**Certified**

**Dr .C. MUTHURAJA, M.A., M.Phil., C.D.J., Ph.D.,**
Head of the Department,
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Dr. C. Muthuraja, M.A., M.Phil., C.D.J., Ph.D.
Head & Associate Professor
PG & Research Department of Economics
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Madurai - 625 002, TN, India

# MEASURING BUOYANCY AND ELASTICITY OF TAX REVENUE IN INDIAN STATES: A DIVISA INDEX APPROACH

A Project Report Submitted in Partial Fulfillment of the Requirements for
The Award of Degree of the

**MASTER OF ARTS IN ECONOMICS**


**A. BALAMURUGAN**
**(18 PEC 01)**

Under the Guidance and Supervision of

**Dr. G. KANNABIRAN, M.A., M.Phil., Ph.D.,**






**POST-GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS**
**THE AMERICAN COLLEGE**
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**APRIL 2020**

**Dr. G. KANNABIRAN., M.A., M.Phil., Ph.D.,**
Associate Professor in Economics,
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The American College,
Madurai – 625002.

# CERTIFICATE

This is to certify that the project entitled "**MEASURING BUOYANCY AND ELASTICITY OF TAX REVENUE IN INDIAN STATES: A DIVISA INDEX APPROACH**" is a bonafide record of work done byMr. A. BALAMURUGAN(18 PEC 01)in Post-Graduate and Research Department of Economics, The American College, Madurai for the fulfillment of the requirement of the Degree of MASTER OF ARTS IN ECONOMICSunder my guidance and supervision during the year 2019 – 2020.

Date:

Place:

(G. KANNABIRAN)

**Certified**

**Dr.C. MUTHURAJA, M.A., M.Phil. C.D.J., Ph.D.,**
Head of the Department,
Post-Graduate & Research Department of Economics,
The American College,
Madurai-625 002.

Dr. C. Muthuraja, Ph.D
Head & Associate Professor
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The American College
Madurai - 625 002, TN, India

## CERTIFICATE

This is certify that the mini project entitled, "**ASSESSMENT OF NUTRITIONAL STATUS AMONG SCHOOL GOING CHILDREN**" submitted to **MADURAI KAMARAJ UNIVERSITY**, Madurai in partial fulfillment of the requirements for the award of the degree of Bachelor of Science in Food Science & Nutrition is record of original work done by **KANIMOZHI .S (Reg. No: 17FSN12)** , during the period of 2019 – 2020 of their study in the Department of Food Science & Nutrition, The American College, Madurai, dissertation has not formed the basis for the award of any Degree/Associate ship/Fellowship or any such other similar title to any candidate of any University.

**Internal Examiner**

Dr. T. SIVARUBAN, M.Sc.,M.Phil.,PGDCA;Ph.D.,
Assistant Professor
Department of Zoology
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**External Examiner**

Dr. T. SIVARUBAN, M.Sc.,
Assistant Pro.
Department of Z
The American Co.
Madurai-625 002

**Director**

Dr. M. DAVAMANI CHRISTOBER
Director
Department of Food Science & Nutrition
The American College
Madurai - 625002

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# CERTIFICATE

This is to certify that this dissertation entitled **"DRYING AND FORMULATION OF RECIPES USING *ERYTHRINA VARIEGATE*"** submitted to Madurai Kamaraj University, Madurai in in partial fulfilment of the requirements for the award of the **Degree of Bachelor of Science in Food Science and Nutrition** is record of original work done by **HARI VISHNU (17FSN07), M. JAYA BALAJI (17FSN11), T.R. ESWAR (17FSN47), K.R. ABINAYA (17FSN48), G.S.SUSHMITHA (17FSN50)** during the year **2019-2020** and their in the Department of Food Science & Nutrition, The American College, Madurai. This dissertation has not formed the basis for the award of any Degree/ Associate ship/ Fellowship or any such other similar title to any candidate of any University.

**Internal Examiner**
**Examiner**

**UG Head**

**External**
Dr. T. SIVARUBAN, M.Sc.,M.Phil.,PGDCA;Ph.D.,
Assistant Professor
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**Director**
**Dr. M. DAVAMANI CHRISTOBER**
Director
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The American College
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## CERTIFICATE

This is certify that this dissertation entitled "**PRODUCT DEVELOPMENT & SURVEY ON PERIODS IRREGULARITY AMONG SCHOOL GOING GIRLS AT AGE OF 15 LINFRO"** submitted to Madurai Kamaraj university, Madurai in partial fulfillment of the requirements for the degree of Bachelor of science in **Food Science and Nutrition** is record of original work done by S.K. Aarthy Priya, S. Agalya, N. Janani Priya, S. Jenifer, V. Muthu Priyadharshini, R. Ramadevi during the period of 2019-2020 of their study in the Department of Food Science & Nutrition. The American College, Madurai, dissertation has not formed the basis award of any Degree/Associate ship/Fellowship or any such other similar title to any candidates of any University.

**Internal Examiner**

**External Examiner**

Dr. T. SIVARUBAN, M.Sc., M.Phil., PGDCA; Ph.D.,
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Madurai – 625002

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# CERTIFICATE

This is to certify that this dissertation entitled **"CHANGES IN DIETARY BEHAVIOUR ASSOCIATED WITH PREDIABETES AND DIABETES AMONG URBAN POPULATION IN MADURAI CITY"** submitted to MADURAI KAMARAJ UNIVERSITY, Madurai partial fulfillment of the requirement for the award of the degree of **Bachelor of Food Science and Nutrition** is record of original work done by **A. DIVYA, R. KARTHEESWARI, R.P. SHIVANI, M. SOWBIYA BANU, S. VAISHALI, P. DEEPA LAKSHMI** during the period of **2019-2020** of their study in the Department of Food Science & Nutrition, The American College, Madurai. This dissertation has not formed the basis for the award of any Degree/Associate Ship/Fellowship or any such other similar title to any candidate of any university.

**Internal Examiner**

**Dr. K. NITHYA**
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**External Examiner**

Dr. T. SIVARUBAN, M.Sc., M.Phil., PGDCA., Ph.D.,
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**Director**

**Dr. M. DAVAMANI CHRISTOBER**
Director
Department of Food Science & Nutrition
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## CERTIFICATE

This is to certify that this mini project entitled **"Formulation and analysis of *Syzygium samarangense* leaves based health drinks by different method"** submitted to MADURAI KAMARAJ UNIVERSITY, Madurai in partial fulfillment of the requirements for the award of the degree of Bachelor of Science in Food Science & Nutrition record of original work done by **A.Afrein (17FSN02), G.M.Nandhini (17FSN15), R.Rohit (17FSN23) S.Saranya vigneshwari (17FSN26), M.Umapriya (17FSN34)** during the year **2019- 2020** is based on the results of the experiments carried out by them the guidance and supervision in the Department of Food Science & Nutrition, The American college, Madurai. This mini project has not been submitted elsewhere for the award of any other college degree/Associate ship/ fellowship or any such other similar title to any candidate of any university.

**Internal Examiner**

**External Examiner**

Dr. T. SIVARUBAN, M.Sc.,M.Phil.,PGDCA,Ph.D.,
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# CERTIFICATE

This is to certify that this dissertation entitled "Production and Characterization of Bio Surfactant and Its Application In Food Industry" submitted by P.Subithkumar(17FSN32), D.Vigneshwaran(17FSN38) in partial fulfillment for the degree of Bachelor of science in Food Science and Nutrition during the year 2017-2020 is based on the results of experiments carried out by her under my guidance and supervision in the Department of Food Science & Nutrition. The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other college degree.

Internal Examiner

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Dr. T. SIVARUBAN, M.Sc., M.Phil., PGDCA., B.L.
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Director

Dr. M. DAVAMANI CHRISTOBER
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Place : Madurai

Date : 15/10/2020

Signature of the supervisor

Dr.S.Priyadharshini

Assistant Professor

Department of Food Science & Nutrition

The American College

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# CERTIFICATE

This is to certify that this dissertation entitled **"PRODUCTION AND CHARACTERIZATION OF ORANGE PIGMENT FROM MARINE WATER AND ITS APPLICATION IN FOOD INDUSTRY"** submitted by M.Sakthivignesh(17FSN24), R.Rajapandi(17FSN21), A.B.Omarmukthar (17FSN17), J.P.Bharath(17FSN43) in partial fulfillment for the degree of Bachelor of science in Food Science and Nutrition during the year 2017-2020 is based on the results of experiments carried out by her under my guidance and supervision in the Department of Food Science & Nutrition. The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other college degree.

**Internal Examiner**

**External Examiner**

Dr. T. SIVARUBAN, M.Sc.,M.Phil.,PGDCA;Ph.D.,
Assistant Professor
Department of Zoology
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Madurai- 625 002

**Director**

Dr. M. DAVAMANI CHRISTOBER
Director
Department of Food Science & Nutrition
The American College
Madurai - 625002

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## CERTIFICATE

This is certify that this dissertation entitled**"AWARENESS ON FUNCTIONAL FOODS& NUTRACEUTICALS FOR EDUCATED WORKING WOMEN "** submitted to MADURAI KAMARAJ UNIVERSITY, Madurai in partial fulfillment of the requirement for the award of the degree of Bachelor of science in Food Science and Nutrition is record of original work done by**A.POORNA (17FSN18), S.PRABHAVATHI (17FSN19), M.PRASANNA VENKATESH (17FSN20), S.SALAMAN RAJA (17FSN25), M.SATHYABAMA(17FSN27), R.SHENBAGA LAKSHMI(17FSN28)** during the period of **2019-2020** of their study in the Department of Food Science & Nutrition, The American college, Madurai. This mini project has not been submitted elsewhere for the award of any other college degree/Associate ship/Fellowship /or any such other similar title to any candidate of any University.

**Internal Examiner**

**External Examiner**

Dr. T. SIVARUBAN, M.Sc.,M.Phil.,PGDC
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**Director**

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The American College
Madurai - 625002



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# ASSESSMENT OF NUTRITIONAL STATUS AMONG SCHOOL- GOING CHILDREN

*A Mini Project submitted to*

**THE AMERICAN COLLEGE**

*in partial fulfillment of the requirements*

*for the degree of*

**BACHELOR OF SCIENCE IN FOOD SCIENCE & NUTRITION**

*By*

**KANIMOZHI. S**

**Reg. No. 17FSN12**




**DEPARTMENT OF FOOD SCIENCE & NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**APRIL 2020**

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# DRYING AND FORMULATION OF RECIPES USING *ERYTHRINA VARIEGATE*

(A Dissertation submitted to The American College, Madurai.

In Partial fulfilment of the requirements for the award of the degree

**BACHELOR OF SCIENCE**
**IN**
**FOOD SCIENCE AND NUTRITION**


**Submitted by**

**G. HARI VISHNU (17FSN07)**

**M.JEYA BALAJI (17FSN11)**

**T.R. ESWAR (17FSN47)**

**K.R. ABINAYA (17FSN48)**

**G.S.SUSHMITHA (17FSN50)**






**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**


**MAY 2020**

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# PRODUCT DEVELOPMENT & SURVEY ON PERIODS IRREGULARITY AMONG SCHOOL GOING GIRLS AT AGE OF 15 (LINFRO)

A Dissertation submitted to The American College, Madurai in Partial fulfillment of the requirements of the award of the degree of **BACHELOR OF SCIENCE IN FOOD SCIENCE & NUTRITION**


Submitted by

- **17FSN01 - S.K. AARTHY PRIYA**
- **17FSN03 - S. AGALYA**
- **17FSN09 - N. JANANI PRIYA**
- **17FSN10 - S. JENIFER**
- **17FSN14 - V. MUTHU PRIYADHARSHINI**
- **17FSN22 - R. RAMADEVI**






**DEPARTMENT OF FOOD SCIENCE & NUTRITION THE AMERICAN COLLEGE ADURAI- 625002**


**JUNE 2020**


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# NUTRITIONAL SUPPLEMENTATION ["FANSHU THREPSI"] FOR CHILDREN WITH AUTISM SPECTRUM DISORDER

A Dissertation submitted to The American College, Madurai

In Partial fulfilment of the requirements of the award of the degree of

**BACHELOR OF SCIENCE IN FOOD SCIENCE AND NUTRITION**


**Submitted by**

**17FSN04- A. DIVYA**

**17FSN13- R. KARTHEESWARI**

**17FSN29- R.P. SHIVANI**

**17FSN31- M.SOWBIYA BANU**

**17FSAN35- S. VAISHALI**

**17FSN49- P. DEEPA LAKSHMI**






**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625002**


**JUNE- 2020**

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# FORMULATION AND ANALYSIS OF *Syzygium samarangense* LEAVES BASED HEALTH DRINKS

*A mini project submitted to the*

**THE AMERICAN COLLEGE**

*in partial fulfillment of the requirements*

*for the degree of*

**BACHELOR OF SCIENCE**

**IN**

**FOOD SCIENCE & NUTRITION**

*By*


**A.AFREIN Reg No.17FSN02**

**G.M.NANDHINI Reg No.17FSN15**

**R.ROHIT Reg No.17FSN23**

**S.SARANYA VIGNESHWARI Reg No.17FSN26**

**M.UMAPRIYA Reg No.17FSN34**






**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI -625002**


**JUNE 2020**

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# Production and Characterisation of Bio Surfactant and Its Application in Food Industry

A Dissertation submitted to **The American College** in Partial fulfillment of the requirements of the award of the degree of Bachelor of Science in **FOOD SCIENCE & NUTRITION.**

Submitted by

P. SUBITH KUMAR - 17FSN32
D.VIGNESHWARAN - 17FSN38

DEPARTMENT OF FOOD SCIENCE & NUTRITION

THE AMERICAN COLLEGE

MADURAI- 625002

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# PRODUCTION AND CHARACTERIZATION OF ORANGE PIGMENT FROM MARINE WATER AND ITS APPLICATION IN FOOD INDUSTRY

A Dissertation submitted to **The American College** in Partial fulfillment of the requirements of the award of the degree of Bachelor of Science in **FOOD SCIENCE & NUTRITION.**

Submitted by


M.SAKTHI VIGNESH - 17FSN24
R.RAJA PANDI - 17FSN21
A.B.OMAR MUKTHR - 17FSN17
J.P.BHARATH - 17FSN43



DEPARTMENT OF FOOD SCIENCE & NUTRITION

THE AMERICAN COLLEGE

MADURAI- 625002


JUNE 2020

Scanned with CamScanner

# AWARENESS ON FUNCTIONAL FOODS & NUTRACEUTICALS FOR EDUCATED WORKING WOMEN

A mini project submitted to **The American College** in partial fulfillment of the requirements for the degree of

**BACHELOR OF SCIENCE IN FOOD SCIENCE & NUTRITION**

Submitted By


| | |
|---|---|
| **A.POORNA** | **17FSN18** |
| **S.PRABHAVATHI** | **17FSN19** |
| **M.PRASANNA VENKATESH** | **17FSN20** |
| **S.SALAMAN RAJA** | **17FSN25** |
| **M.SATHYABAMA** | **17FSN27** |
| **R.SHENBAGA LAKSHMI** | **17FSN28** |

**DEPARTMENT OF FOOD SCIENCE AND NUTRITION THE AMERICAN COLLEGE**

**MADURAI -625002**


**JUNE 2020**

Scanned with CamScanner

# ASSESSMENT OF NUTRITIONAL STATUS AMONG SCHOOL- GOING CHILDREN

*A Mini Project submitted to*

**THE AMERICAN COLLEGE**

*in partial fulfillment of the requirements*

*for the degree of*

**BACHELOR OF SCIENCE IN FOOD SCIENCE & NUTRITION**

*By*

**KANIMOZHI. S**

**Reg. No. 17FSN12**




**DEPARTMENT OF FOOD SCIENCE & NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**APRIL 2020**

Scanned with CamScanner

# DRYING AND FORMULATION OF RECIPES USING *ERYTHRINA VARIEGATE*

(A Dissertation submitted to The American College, Madurai.

In Partial fulfilment of the requirements for the award of the degree

**BACHELOR OF SCIENCE**
**IN**
**FOOD SCIENCE AND NUTRITION**


**Submitted by**

**G. HARI VISHNU (17FSN07)**

**M.JEYA BALAJI (17FSN11)**

**T.R. ESWAR (17FSN47)**

**K.R. ABINAYA (17FSN48)**

**G.S.SUSHMITHA (17FSN50)**






**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**


**MAY 2020**

Scanned with CamScanner

# PRODUCT DEVELOPMENT & SURVEY ON PERIODS IRREGULARITY AMONG SCHOOL GOING GIRLS AT AGE OF 15 (LINFRO)

A Dissertation submitted to The American College, Madurai in Partial fulfillment of the requirements of the award of the degree of **BACHELOR OF SCIENCE IN FOOD SCIENCE & NUTRITION**


Submitted by

- **17FSN01 - S.K. AARTHY PRIYA**
- **17FSN03 - S. AGALYA**
- **17FSN09 - N. JANANI PRIYA**
- **17FSN10 - S. JENIFER**
- **17FSN14 - V. MUTHU PRIYADHARSHINI**
- **17FSN22 - R. RAMADEVI**






**DEPARTMENT OF FOOD SCIENCE & NUTRITION THE AMERICAN COLLEGE ADURAI- 625002**


**JUNE 2020**


Scanned with CamScanner

# NUTRITIONAL SUPPLEMENTATION ["FANSHU THREPSI"] FOR CHILDREN WITH AUTISM SPECTRUM DISORDER

A Dissertation submitted to The American College, Madurai

In Partial fulfilment of the requirements of the award of the degree of

**BACHELOR OF SCIENCE IN FOOD SCIENCE AND NUTRITION**


**Submitted by**

**17FSN04- A. DIVYA**

**17FSN13- R. KARTHEESWARI**

**17FSN29- R.P. SHIVANI**

**17FSN31- M.SOWBIYA BANU**

**17FSAN35- S. VAISHALI**

**17FSN49- P. DEEPA LAKSHMI**






**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625002**


**JUNE- 2020**

Scanned with CamScanner

# FORMULATION AND ANALYSIS OF *Syzygium samarangense* LEAVES BASED HEALTH DRINKS

*A mini project submitted to the*

**THE AMERICAN COLLEGE**

*in partial fulfillment of the requirements*

*for the degree of*

**BACHELOR OF SCIENCE**

**IN**

**FOOD SCIENCE & NUTRITION**

*By*


**A.AFREIN Reg No.17FSN02**

**G.M.NANDHINI Reg No.17FSN15**

**R.ROHIT Reg No.17FSN23**

**S.SARANYA VIGNESHWARI Reg No.17FSN26**

**M.UMAPRIYA Reg No.17FSN34**






**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI -625002**


**JUNE 2020**

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# Production and Characterisation of Bio Surfactant and Its Application in Food Industry

A Dissertation submitted to **The American College** in Partial fulfillment of the requirements of the award of the degree of Bachelor of Science in **FOOD SCIENCE & NUTRITION.**

Submitted by

P. SUBITH KUMAR - 17FSN32
D.VIGNESHWARAN - 17FSN38

DEPARTMENT OF FOOD SCIENCE & NUTRITION

THE AMERICAN COLLEGE

MADURAI- 625002

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# PRODUCTION AND CHARACTERIZATION OF ORANGE PIGMENT FROM MARINE WATER AND ITS APPLICATION IN FOOD INDUSTRY

A Dissertation submitted to **The American College** in Partial fulfillment of the requirements of the award of the degree of Bachelor of Science in **FOOD SCIENCE & NUTRITION.**

Submitted by


M.SAKTHI VIGNESH - 17FSN24
R.RAJA PANDI - 17FSN21
A.B.OMAR MUKTHR - 17FSN17
J.P.BHARATH - 17FSN43



DEPARTMENT OF FOOD SCIENCE & NUTRITION

THE AMERICAN COLLEGE

MADURAI- 625002


JUNE 2020

Scanned with CamScanner

# AWARENESS ON FUNCTIONAL FOODS & NUTRACEUTICALS FOR EDUCATED WORKING WOMEN

A mini project submitted to **The American College** in partial fulfillment of the requirements for the degree of

**BACHELOR OF SCIENCE IN FOOD SCIENCE & NUTRITION**

Submitted By


| | |
|---|---|
| **A.POORNA** | **17FSN18** |
| **S.PRABHAVATHI** | **17FSN19** |
| **M.PRASANNA VENKATESH** | **17FSN20** |
| **S.SALAMAN RAJA** | **17FSN25** |
| **M.SATHYABAMA** | **17FSN27** |
| **R.SHENBAGA LAKSHMI** | **17FSN28** |

**DEPARTMENT OF FOOD SCIENCE AND NUTRITION THE AMERICAN COLLEGE**

**MADURAI -625002**


**JUNE 2020**

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# UTILIZATION OF BAMBOO SHOOTS IN FUNCTIONAL THERAPEUTIC DRINK FORMULATION, ITS PROXIMATE ANALYSIS.

A dissertation submitted to the

**THE AMERICAN COLEGE MADURAI**

In partial fulfillment of the requirements for the degree of

**MASTER OF SCEINCE**

**IN**

**FOOD SCIENCE**

BY

**P.SUGAPRIYA**

**Reg. 18PFS20**

**DEPARTMENT OF FOOD SCIENCE & NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**JULY 2020**

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# ENHANCEMENT OF NUTRIENT CONTENT IN FOOD BY THE VALUE ADDITION OF *SOLANUM TRILOBATUM* BASED PRODUCT

(A Dissertation submitted to The American College, Madurai.

In Partial fulfillment of the requirements for the award of the degree

**MASTER OF SCIENCE IN FOOD SCIENCE AND NUTRITION**


**Submitted by**

**S.S.MOHAN RAJ**

**(Reg. No. 18PFS08)**






**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**


**JULY 2020**

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# A STUDY ON PECTIN EXTRACTION FROM ROSE APPLE FRUIT

*A dissertation submitted to*

**THE AMERICAN COLLEGE**

*in partial fulfillment of the requirements*

*for the degree of*

**MASTER OF SCIENCE**

**IN**

**FOOD SCIENCE**

*By*

**SHAHANA ASHARAF M.P**

**Reg. No. 18PFS17**




**DEPARTMENT OF FOOD SCIENCE & NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**APRIL 2020**

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# PHYSIOCHEMICAL PROPERTIES AND ITS MARVOLOUS HEALTH EFFECTS OF *MOMORDICA CHARANTIA* AND *MORMODICA CHARANTIA*

(A Dissertation submitted to The American College, Madurai.

In Partial fulfillment of the requirements for the award of the degree

**MASTER OF SCIENCE IN FOOD SCIENCE AND NUTRITION**

**Submitted by**

**J. MARTEEN**

**(Reg. No. 18PFS30)**




**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**MAY 2020**

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# ENRICHMENT OF REFINED OIL CAKE BY SOLID STATE FERMENTATION WITH ENHANCED ANTIOXIDANT ACTIVITIES AND NUTRITIONAL QUALITIES

A Dissertation submitted to The American College, Madurai

In Partial fulfillment of the requirements of the award of the degree of

**MASTER OF SCIENCE IN FOOD SCIENCE**

**Submitted by**


**M. PONSANGEETHA**

**(18PFS13)**






**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625002**


**JULY 2020**

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# ISOLATION AND CHARACTERIZATION OF PROBIOTIC STARIN POF4 FROM ORANGE AND ITS IN VITRO EVALUATION

**A dissertation submitted to the**

**THE AMERICAN COLLEGE MADURAI**

In partial fulfillment of the requirements for the degree of

**Master of science**

**By**

**T.DEVEKI**

**Reg.No:18PFS26**

*Since 1881*

**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI-625002**

**JULY 2020**

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# OPTIMIZATION OF SPRAY DRYING PARAMETERS FOR THE DEVELOPMENT OF *PASSIFLORA EDULIS* JUICE POWDER USING RESPONSE SURFACE METHODOLOGY

A Dissertation submitted to

The American College, Madurai

In partial fulfillment of the requirement for the degree of

**MASTER OF SCIENCE**

**IN**

**FOOD SCIENCE**

BY

**PRIYADHARSHINI. A**

**(18PFS14)**

**SINCE 1881**

**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI-625002**

**JULY 2020**

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# PRODUCTION AND CHARACTERISATION OF CAROTENOID PIGMENT FROM BACTERIA

A dissertation submitted to the

**THE AMERICAN COLEGE MADURAI**

In partial fulfillment of the requirements for the degree of

**MASTER OF SCINCE**

**IN**

**FOOD SCIENCE**

BY

**T. HARINI**

**Reg No. 18PFS03**




**DEPARTMENT OF FOOD SCIENCE & NUTRITION THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**JULY 2020**

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# DEVELOPMENT OF ANTI-MICROBIAL AGENTS AGAINST SHRIMP PATHOGENS

A dissertation submitted to the

**THE AMERICAN COLEGE MADURAI**

In partial fulfillment of the requirements for the degree of

**MASTER OF SCINCE**

**IN**

**FOOD SCIENCE**

BY

**S.KAMALAVENI**

**Reg No. 18PFS04**

**DEPARTMENT OF FOOD SCIENCE & NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**JULY 2020**

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# CHANGES IN DIETARY BEHAVIOUR ASSOCIATED WITH PREDIABETES AND DIABETES AMONG URBAN POPULATION IN MADURAI CITY

(A Dissertation submitted to The American College, Madurai.
In Partial fulfillment of the requirements for the award of the degree of)

**MASTER OF SCIENCE IN FOOD SCIENCE AND NUTRITION**

**Submitted by**

**R.YAMUNA**

**(Reg.No.18PFS24)**

**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**JUNE 2020**

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# FORMULATION AND CHARACTERISATION OF FUNCTIONAL FRUIT YOGHURT WITH CHIA SEEDS FROM A2 MILK

A dissertation submitted to the

**THE AMERICAN COLEGE MADURAI**

In partial fulfillment of the requirements for the degree of

**MASTER OF SCIENCE**

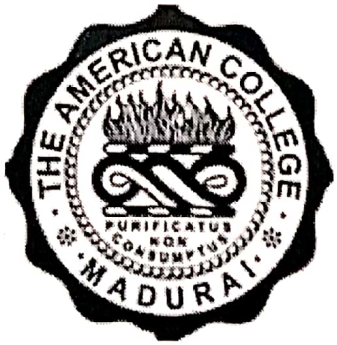
**IN**

**FOOD SCIENCE**

By

**A. Alex**

**Reg. 18PFS01**




**DEPARTMENT OF FOOD SCIENCE & NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**APRIL 2020**

Scanned with CamScanner

# OPTIMIZATION OF OIL BLENDS TO INCREASE SENSORIAL AND PHYTOCHEMICAL PROPERTIES OF COCONUT OIL WITH PASSION FRUIT SEED OIL

A Dissertation submitted to

The American College, Madurai

In partial fulfillment of the requirement of the award of the degree of

**Master of Science**

**In**

**FOOD SCIENCE**

**Submitted by**

**S. MOHAMMED AKRAM**

**(18PFS07)**

**SINCE 1881**

**DEPARTMENT OF FOOD SCIENCE AND NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI-625002**

**MARCH 2020**

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# QUALITY EVALUATION OF WINE PREPARED FROM AMLA AND JAGGERY

A Dissertation submitted to The American College in partial fulfillment of the requirements for the award of Degree of

MASTER OF SCIENCE IN

FOOD AND NUTRITION

Submitted By

AJAY KRISHNA

(Reg. NO: 18PFS27)

Under the Guidance and Supervision of

MRS C.Nalini M.Sc,M.Phil

POST GRADUATE AND RESEARCH

DEPARTMENT OF FOOD SCIENCE AND NUTRITION

THE AMERICAN COLLEGE

MADURAI - 625002

APRIL 2020

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# A STUDY ON WATER PURIFICATION PROPERTY OF SUNFLOWER PETALS EXTRACT WITH GUAVA LEAVES EXTRACT

*A dissertation submitted to the*

**THE AMERICAN COLEGE**

*in partial fulfillment of the requirements*

*for the degree of*

**MASTER OF SCIENCE**

**IN**

**FOOD SCIENCE**

*By*

**SISIRA C K**

**Reg No. 18PFS18**

**DEPARTMENT OF FOOD SCIENCE & NUTRITION**

**THE AMERICAN COLLEGE**

**MADURAI – 625 002**

**APRIL 2020**

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A.1301. The Madurai District Cooperative Milk Producers' Union Limited,
Sivagangai Main Road, Sathamangalam, Madurai 625 020.

**Date: 28.09.2020**

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.A.Alex (RegisterNo.18PFS01), pursuing II year M.Sc., Food Science and Nutrition at The American College, Madurai, has undergone project work for the fourth semester from 01 February 2020 to 01 March 2020.

During the above period, his involvement in the subject & conduct was good.

**Manager (Admin)**

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# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **A.Loghupandi (18PFS05)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE,** Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

HAP

**Hatsun Agro Product Limited,**
SF:No.451-1A,
Sengan Pasuvanthalave Village,
Veppalahalli. Post,
Marandahalli Main Road,
palacoade TK, Dharmapuri-636 805.
P: 04348-291799-294667,249650

**Ref: HAP/HR/INPLANT/2019.** **Date: 10.06.2019**

## CERTIFICATE

This is to certify that **Ms.Mohanraj S S(Reg No:18PFS08), 2nd Year M.Sc - Food Science and Nutrition** student in The American College. Has Undergone the Intership Training at our Palacode Plant from **21st May'19 to 31st May'19.**

During his trainee period character and conduct was found good.

We wish him all the best in future endeavor.

**for HATSUN AGRO PRODUCT LTD.,**

10/06/2019

**Elavarasan AP**
**Assistant Manager - HR**



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# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **A.Priyadarshini (18PFS14)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard**, Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIFPT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **S.Salai gnana kolundu (18PFS16)**, a student of **M.Sc Food Science**, **THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

FEBIN
marine foods

*Date: 20.06.2019*

*TO WHOMSOEVER IT MAY CONCERN*

*This is to certify that* ***Ms. Sisira C.K , Final*** *year* ***Msc Food Science*** *student of* ***The American College, Madurai*** *,has done her in plant training in our organization during the period from 1st June 2019 to 20th June 2019 as part of their curriculum.*

*She had been given all the required data and guidance for the successful completion of the training and completed her assignment in the limited span available for completion.*

*Her attendance during the period of training was regular and to the best of our knowledge and her conduct and character was found good.*

*We wish to all success in her future assignments.*

**For FEBIN MARINE FOODS**

**SEEMA SANAL**

**TECHNICAL MANAGER**

FEBIN MARINE FOODS ★ Eramalloor ★ ALLEPPEY 688 537

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **P.Sugapriya (18PFS20)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

A.1301. The Madurai District Cooperative Milk Producers' Union Limited,
Sivagangai Main Road, Sathamangalam, Madurai 625 020.

**Date: 28.09.2020**

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr..Ajaykrishna (RegisterNo.18PFS527), pursuing II year M.Sc., Food Science and Nutrition at The American College, Madurai, has undergone project work for the fourth semester from 01 February 2020 to 01 March 2020.

During the above period, his involvement in the subject & conduct was good.

**Manager (Admin)**

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A.1301. The Madurai District Cooperative Milk Producers' Union Limited,
Sivagangai Main Road, Sathamangalam, Madurai 625 020.

**Date: 28.09.2020**

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.J.Marteen (RegisterNo.18PFS030), pursuing II year M.Sc., Food Science and Nutrition at The American College, Madurai,has undergone project work for the fourth semester from 01 February 2020 to 01 March 2020.

During the above period, his involvement in the subject & conduct was good.

**Manager (Admin)**

Scanned by CamScanner

HAP

Hatsun Agro Product Ltd.
Registered Office :
Domaine,Door No : 1/20A,
Rajiv Gandhi Salai (OMR),
Karapakkam,
Chennai - 600 097. India.
T : 044-24501622,
F : 044-24501422
E : info@hap.in | www.hap.in
CIN : L15499TN1986PLC012747

31.05.2019

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms.T.Harini** of **The American College** has completed **Internship Training** at our **Madurai Dairy** in **Production department** from **01.05.2019 to 31.05.2019.** She has done an exhaustive study and successfully completed her training.

During the Training period, we found her sincere, dedicated and her conduct was good.

With Best Wishes

For Hatsun Agro Product Ltd

ANILKUMAR M
ASSISTANT MANAGER-HR

HAP

Hatsun Agro Product Ltd.
Registered Office :
Domaine,Door No : 1/20A,
Rajiv Gandhi Salai (OMR),
Karapakkam,
Chennai - 600 097. India.
T : 044-24501622
F : 044-24501422
E : info@hap.in | www.hap.
CIN : L15499TN1986PLC012

31.05.2019

**TO WHOMSOEVER IT MAY CONCERN**

*This is to certify that* **Ms.S.Kamalaveni** of **The American College** has completed **Internship Training** at our **Madurai Dairy** in **Production department** from **01.05.2019 to 31.05.2019.** She has done an exhaustive study and successfully completed her training.

During the Training period, we found her sincere, dedicated and her conduct was good.

With Best Wishes

For Hatsun Agro Product Ltd

ANILKUMAR M
ASSISTANT MANAGER-HR

GSTIN : 33AFNPA7431D1ZW

# Lakshmi Feed Mill

**Office :** 19A, Poonthamalli Street, K.K.Road, Villupuram - 605 602. Tamilnadu, India. Tel : +91 04146 221130,
**Factory :** R.S.No.40/1, Koothampoondi Road, Vikaravandi, Villupuram T.K.,Tamilnadu, India.
email : lakshmi_feedmill@yahoo.co.in

Date: 15.06.19

## TO WHOM IT MAY CONCERN

This is to certify that **Mr.S.Mohammed Akram** (Roll No: 18PFS07 doing M.Sc. Food Science) at **The American College** (Autonomous),Madurai have done In-plant training in our Industry from 06.06.19 to 15.06.19. During this period of training we found him to be punctual, hardworking and Inquisitive.

We wish him success in his future endeavors.

For Lakshmi Feed Mill,

LAKSHMI FEED MILL VIKRAVANDI 605 652.

Authorized Signatory

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **M.Ponsangeetha (18PFS13)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

FEBIN
marine foods

*Date: 20.06.2019*

***TO WHOMSOEVER IT MAY CONCERN***

*This is to certify that* ***Ms. Shahana Asharaf M.P , Final*** *year* ***Msc Food Science*** *student of* ***The American College, Madurai*** *,has done her in plant training in our organization during the period from 1st June 2019 to 20th June 2019 as part of their curriculum.*

*She had been given all the required data and guidance for the successful completion of the training and completed her assignment in the limited span available for completion.*

*Her attendance during the period of training was regular and to the best of our knowledge and her conduct and character was found good.*

*We wish to all success in her future assignments.*

**For FEBIN MARINE FOODS**

**SEEMA SANAL**

**TECHNICAL MANAGER**

FEBIN MARINE FOODS ★ Eramalloor ★ ALLEPPEY 688 537

Eramalloor, Alappuzha - 688 537, Kerala, India., Phone : +91-478-2879966, 2879778, Fax : 91 478-2879962,
E-mail : lab@febinmarine.com, Website : www.febinmarine.com

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **R.Yamuna (18PFS24)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

To

Vice principal

American college

Madurai-625002.

Dear Sir,

We would like to inform you that "**Mr.Anest raj Reg no:18pfs25**" M.sc Food Science has undergo internship program in our organization during period from 24.12.18 to 02.01.19

For INDIAN FOODS PRIVATE LIMITED

2.1.19.

Authorised Signatories

Date: 02.01.2019.

Place: Thattankulam

INDIANFOODS
Simple & Soulful

INDIANFOODS PVT LTD.
Factory & Admin Office : Survey Number : 169/27A, Thattankulam Village,
Rameshwaram Highway, Tiruppuvanam - 630611
Tel : (4574)-265234 E-Mail : ifpl.mdu@gmail.com

Scanned with CamScanner

# Internship Certificate

This is to certify that **Ms. Deveki. T.** has worked as Summer intern from June 3rd 2019 to July 3rd 2019 under the guidance of Mr. K. Vatchravelu, Sr. Technical Officer (3), Central Instruments Facility & Services (CIFS) Department, CSIR-CFTRI in the area of Analytical Instrumentation.

The performance evaluation for the above person for the period of internship is as follows.

| | | | | | |
|---|---|---|---|---|---|
| 1. | Attendance | Satisfactory | | Not satisfactory | |
| | | ✓ | | | |
| 2. | Overall Performance | Excellent | Very Good | Good | Average |
| | | ✓ | | | |
| 3. | Remarks (if any) | Very attentive and enthusiastic learner towards new concepts and modern techniques used in analytical Instruments | | | |

3/7/2019

**Signature with Date**

**Name: Mr. P. Manilal**
Designation: Sr. Prinicipal Scientsit
&Head, PMC

पी. मणिलाल / P. MANILAL
प्रधान / HEAD
योजना मॉनीटरिंग एवं समन्वयन
Planning, Monitoring & Co-ordination
केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान
Central Food Technological Research Institute
मैसूर / Mysore – 570 020

03/07/2019

**Guide's Signature**
(K. VATCHARAVELU)

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **N.Dinesh Pandi (18PFS28)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **S.Arun Kumar (18PFS29)**, a student of **M.Sc Food Science**, **THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

# A STUDY ON EMPLOYEE WELFARE MEASURES IN APARAJITHA CORPORATE SERVICES LIMITED

**A Project Submitted to**

**THE AMERICAN COLLEGE, Madurai**
***(An Autonomous Institution Affiliated to Madurai Kamaraj University)***

**in partial fulfillment Of the requirement for the Degree of Master of Business Administration**


**Submitted By**

**A.AFRINE FATHIMA (13 MBA 03)**

**Under The Guidance Of**

**Mrs.REENA ELIZABETH M.B.A., Mphil.**
**Department of MBA**






**DEPARTMENT OF MANAGEMENT STUDIES**

**THE AMERICAN COLLEGE**
**Madurai – 625002**


**APRIL – 2015**

ACSL/HRD/CORE/Gen14 -15/1560 31-Mar-15

## TO WHOMESOEVER IT MAY CONCERN

This is to certify that **Ms.Afrine Fatima A, II year MBA student of American college** had done her project on "A Study on Welfare Measures in Aparajitha" from December 2014 to March 2015 in our organization.

During the above period, her character and conduct were good.

We wish her all success in her future endeavors.

**FOR APARAJITHA CORPORATE SERVICES (P) LTD**

**MANAGER – Business HR**

# A STUDY ON EMPLOYEES WELFARE MEASURES WITH SPECIAL REFERENCE TO SAFETY MEASURES AT WHITE HOUSE

**A Project Submitted to**

**THE AMERICAN COLLEGE, Madurai**

**(An Autonomous Institution Affiliated to Madurai Kamaraj University)**

**In partial fulfillment of the requirement for the Degree of Master of Business Administration**


**Submitted By**

**MOHAMED HARISH.P.S (13 MBA 27)**

**Under The Guidance Of**

**(Mr. M. MANO SAMUEL)**

**(Assistant professor)**






**DEPARTMENT OF MANAGEMENT STUDIES**

**THE AMERICAN COLLEGE**

**Madurai – 625002**


**April – 2015**

**White House**
6, GST Road, Guduvanchery,
Chennai - 603 202. India

04.03.2015

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. P. S. MOHAMED HARISH, (13MBA27) of American College, Madurai has successfully completed his project entitled "**Safety Measures for Employees**" from 4th December 2014 to 4th March 2015.

We wish all the best for his future endeavors

**For WHITE HOUSE**

**(AGM-HR)**

CBS Technology

18.01.2016

L. NITHYA ROOPA
1383 Vallalar colony,
18" Main road,
10th Street Sharon Shelters,
1 blocks Anna Nagar west
Chennai.

## INTERSHIP OFFER LETTER

Dear **L. Nithya Roopa,**

M/s. **CBS Technology** is pleased to offer a **MBA (Major in HRM)** an Educational Internship Opportunity as an intern. You will report directly to **Manager Mrs. Loganayaki**. This position is located in Chennai.

As you will be receiving academic credit for this position, you will not be paid. Additionally students do not receive benefits as part of their internship program. Your schedule will be approximately for **Three months**. Please review and sign below Congratulations and welcome to the team!

Sincerely,

**Rajesh. M**
**Partner**

I accept the above offer,

L. Nithya Roopa.

Signature
Date: 18.1.16

# A STUDY ON MEASURING THE STRESS LEVEL OF THE EMPLOYEES OF CBS TECHNOLOGY LIMITED,CHENNAI

**A Project Submitted to**

Since 1881

**AMERICAN SCHOOL OF BUSINESS ADMINISTRATION**
**(ASBA)**

## THE AMERICAN COLLEGE, Madurai – 625002.

*(An Autonomous Institution Affiliated to Madurai Kamaraj University)*

in partial fulfillment of the requirement for the Award of the Degree of
Master of Business Administration

**Submitted By**

**L.NITHYA ROOPA (14 MBA 28)**

**Under The Guidance Of**

**Prof. Dr. S. Raju M.B.A., Ph.D.,**
**Director, ASBA**

**APRIL – 2016**

# A STUDY ON APPLICATION OF CAMEL ANALYSIS IN PERFORMANCE MEASUREMENT OF INDIAN BANK

**A Project Submitted to**

SINCE 1881

**AMERICAN SCHOOL OF BUSINESS ADMINISTRATION**
**(ASBA)**

**THE AMERICAN COLLEGE, Madurai – 625014**
***an Autonomous Institution Affiliated to Madurai Kamaraj University***
**Re-accredited (2nd Cycle) by NAAC with Grade "A"**
**CGPA 3.46 on a 4 –point scale**

in partial fulfillment of the requirement for the Degree of

Master of Business Administration


**Submitted By**

**S.VINITHA (16MBA50)**

**Under The Guidance Of**

**R.JASMINE SUGIRTHABAI MBA., MPhil**

**Lecturer**


**APRIL – 2018**

Indian Bank
email:tallakulam@indianbank.co.in

TALLAKULAM BRANCH,
73, Alagar Koil Road, Madurai 625 002
Phone : 0452-2530609, 2530051

## TO WHOM IT MAY BE CONCERN

This is to certify that ***Ms. S.Vinitha (16MBA50)*** Pursuing M.B.A.II Year in"The American School of Business Administration" Satellite Campus, Chatrapati Madurai has undergone Project work with title of " Observation on CAMEL Analysis Of Balance Sheet" Assigned by her's college, in Indian Bank, Tallakulam Branch Madurai From (28.12.2017 to 28.03.2018) and during this period her performance was excellent.

For INDIAN BANK

Chief Manager, Tallakulam
Madurai-625 002

Chief Manager

# A STUDY ON RECRUITMENT AND SELECTION PROCESS IN SKYLARK HR SOLUTIONS PRIVATE LIMITED, CHENNAI

**A Project Submitted to**
**AMERICAN SCHOOL OF BUSINESS ADMINISTRATION**
**(ASBA)**

In partial fulfillment of the requirement for the Degree of

Master of Business Administration (MBA)


**Submitted By**

**M. AMUTHA DEVI (18 MBA 201)**

**Under The Guidance Of**

**S. VIJAY MALLIK RAJ, MBA, PhD**

**ASSISTANT PROFESSOR, ASBA**


SINCE 1881


**THE AMERICAN COLLEGE, Madurai – 625014**
*An Autonomous Institution Affiliated to Madurai Kamaraj University*
Re-accredited (2nd Cycle) by NAAC with Grade "A"
CGPA 3.46 on a 4 –point scale

APRIL – 2020

SKYLARK
HR SOLUTIONS

11 March 2020

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Amutha Devi M MBA Regn. No. 18MBA201 from American School of Business Administration, Madurai. She has completed her Project titled "A STUDY ON RECRUITMENT AND SELECTION PROCESS "with Skylark HR Solutions Private Ltd, Chennai from 4 December 2019 till 9 March 2020.

Her performance during her project was satisfactory and we wish her all the success in her future projects.

Yours truly,

For Skylark HR Solutions Pvt.Ltd.

Surekha Raj. K

Managing Director

SKYLARK HR SOLUTIONS PVT. LTD. CHENNAI 600078

# A STUDY ON THE CHALLENGES FACED BY MICRO SMALL AND MEDIUM ENTERPRISES IN SIVAKASI

**A Project Submitted to**
**AMERICAN SCHOOL OF BUSINESS ADMINISTRATION**
**(ASBA)**

in partial fulfillment of the requirement for the Degree of

Master of Business Administration (MBA)


**Submitted By**

**ANANDH NS**

**18MBA202**


**Under The Guidance Of**

**Mr.Dr.Kannan Ph.D.,MBA**

**Assistant professor**

SINCE 1881


**THE AMERICAN COLLEGE, Madurai – 625014**
***an Autonomous Institution Affiliated to Madurai Kamaraj University***
**Re-accredited (2nd Cycle) by NAAC with Grade "A"**
**CGPA 3.46 on a 4 –point scale**

**APRIL – 2020**

# CENTRE FOR ENTREPRENEURSHIP DEVELOPMENT (TAMIL NADU)

**Registered Office** : Hotel Radhakrishna Buildings, No.17 & 18, Dhanappa Mudali Street, Madurai - 625 001.
**Training Centre** : Paddy and Flower Market Complex, Mattuthavani, Madurai - Melur Main Road, Madurai - 625 007.
Ph : 0452 - 2583562, 2583563, Fax : 0452 - 2583574 Email : info@cedtn.org Website: www.cedtn.org


September 18, 2020

## CERTIFICATE

This is to certify that Mr. **N.S. ANANDH,** S/o. Mr. K.N. Sundarrajan, residing at No.2/7, Muthiah Chettiar Compound, Raja Mill Road, Madurai – 625 001 is an MBA student (Major in Entrepreneurship Studies) of The American College, Madurai has successfully completed 3 months internship programme from **08.12.2019 to 07.03.2020 at CED (Tamil Nadu), Madurai.** During the period of internship programme with us, he was found punctual, hard working and inquisitive.

We wish him every success life.

Centre for Entrepreneurship Development (Tamil Nadu)
Paddy & Flower Market Complex Mattuthavani MADURAI 625 007

**(Dr. V. MOHANRAM)**
Nodal Officer
DST – NIMAT & PM-YUVA Scheme

# FINANCIAL PERFORMANCE OF LOYAL TEXTILE MILLS

**A Project Submitted to**
**AMERICAN SCHOOL OF BUSINESS ADMINISTRATION**
**(ASBA)**

In partial fulfillment of the requirement for the Degree of

Master of Business Administration (MBA)


**Submitted By**

**S. DAISY RANI (18MBA204)**

**Under the Guidance Of**
**Mrs. NANCY IMMANUEL, M. Com, MBA**
**LECTURER, ASBA**


SINCE 1881


**THE AMERICAN COLLEGE, Madurai – 625014**
***An Autonomous Institution Affiliated to Madurai Kamaraj University***

**Re-accredited (2nd Cycle) by NAAC with Grade "A"**
**CGPA 3.46 on a 4 –point scale**

**APRIL – 2020**

LOYAL

LOYAL TEXTILE MILLS LTD.

November 22, 2019

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Ms S.Daisi Rani (18MBA204) student of American college, pursued her internship program under human resources team 27th November 2019 to 28th February 2020.

We are confident that she would be a definite value addition to her future employer.

During the period of the internship her performance was good. We wish her all the best for future endeavors.

Sincerely,

For Loyal textile mills ltd.

Kovilpatti - 628 501 Corporate Office New No. 83 / Old No. 41 1st Main Road R A Puram Chennai -
E-Mail : info@loyaltestiles.com web : www.loyaltextiles.com

American School of Business Administration

# "A STUDY ON FACTORS INFLUENCING JOB SATISFACTION & ITS IMPACT ON EMPLOYEE RETENTION WITH REFERENCE TO "SHANTHI GEARS LIMITED", COIMBATORE.

**A Project Submitted to**

**AMERICAN SCHOOL OF BUSINESS ADMINISTRATION**

**(ASBA)**

In partial fulfillment of the requirement for the Degree of

**Master of Business Administration (MBA)**

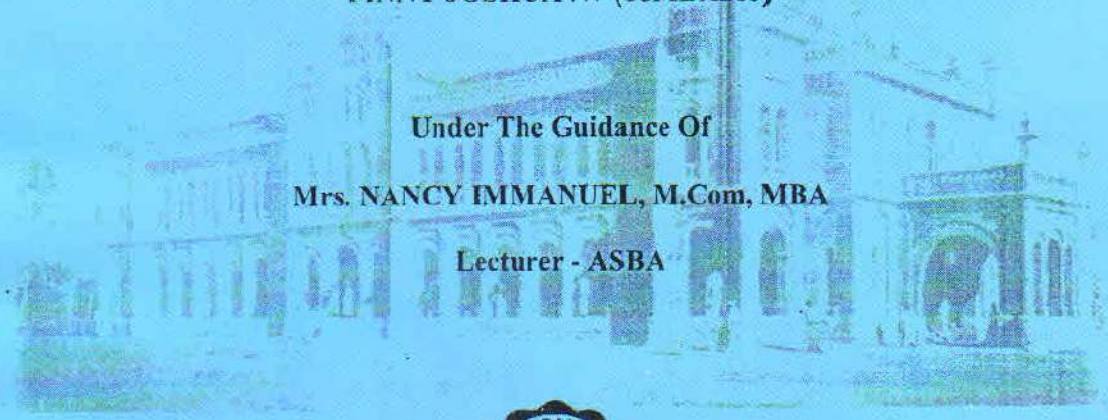

**Submitted By**

**FINNY JOSHUA .W (18MBA205)**

**Under The Guidance Of**

**Mrs. NANCY IMMANUEL, M.Com, MBA**

**Lecturer - ASBA**

Since 1881


**THE AMERICAN COLLEGE, Madurai – 625014**

***An Autonomous Institution Affiliated to Madurai Kamaraj University***

**Re-accredited (2nd Cycle) by NAAC with Grade "A"**

**CGPA 3.46 on a 4 – point scale**

**APRIL – 2020**

American School of Business Administration

Shanthi Gears

**SHANTHI GEARS LIMITED**

murugappa

Regd. Office
304-A, Trichy Road
Singanallur
Coimbatore - 641 005

Phone +91-422-4545745
Fax +91-422-4545700
E-mail info@shanthigears.murugappa.com
Website www.shanthigears.com
CIN L29130TZ1972PLC000649
GST 33AADCS9692L1Z7

Ref:HR/Proj.Trg/2020
Date: 22.09.2020

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Mr. Finny Joshua W (18MBA205),** MBA student from M/s. The American College, Madurai carried out his Industrial Project in our Organization from 24.02.2020 to 17.03.2020 on non-stipendiary basis.

We wish him all success in his future endeavor.

**for Shanthi Gears Limited**

**B. Vivek**
**Head HR & Admin**

SHANTHI GEARS LTD. CBE

# A STUDY ON HIRING ACTIVITY AND WORK FLOW ANALYSIS OF BIOCON BIOLOGICS INDIA LIMITED

**A Project Submitted to**
**AMERICAN SCHOOL OF BUSINESS ADMINISTRATION**
**(ASBA)**

in partial fulfillment of the requirement for the Degree of

Master of Business Administration (MBA)


**Submitted By**

**GOPINATH R**

**18MBA206**


**Under The Guidance Of**

**Mr. P.F.E. Divakaran, MBA,**
**M.Phil.**

**Assistant Professor**

SINCE 1881


**THE AMERICAN COLLEGE, Madurai – 625014**
***an Autonomous Institution Affiliated to Madurai Kamaraj University***
**Re-accredited (2nd Cycle) by NAAC with Grade "A"**
**CGPA 3.46 on a 4 –point scale**

**APRIL – 2020**

From: Internship.Biocon@biocon.com
Subject: Intern Onboard : Welcome
Date: 10-Dec-2019 at 10:50:00 AM
To: gopigreen25@gmail.com
Cc: Internship.Biocon@biocon.com

Dear Gopinath R,

Greetings from Biocon!

The date of joining for internship will be confirmed through the internship offer letter. In the meantime, please upload the scanned copies of the documents listed below by clicking on the link to process your candidature further.

Mandatory Documents:

- Biocon_Application_Form
- Updated_CV
- xth_Marks_Sheet
- Bonafide_Certificate (Compulsory for candidates pursuing the degree/post graduate degree/PhD)
- Highest_Degree_Certificate
- Government_ID_Proof
- Bank_Document

Note: Mandatory documents to be uploaded with file extension names as mentioned above.
Please click on the link to login to Intern Career Portal to upload the documents.
Please use the below credentials and OTP sent to your mobile for login to the portal.

Login Id : gopigreen25@gmail.com
Password : &N3jGONX

Regards, Human Resource Department
BioconBiologics India Ltd
20th KM, Hosur Road, (Opposite St. Francis De Sales School)
Electronics City, Phase I
Bangalore, India - 560 100; Phone : +91(80) 2808-2228

**Biocon Internship**
COMMON ID - HRD
**Biocon Limited** | 20th KM, Hosur Road, Electronic City, Bangalore - 560100, India
E: Internship.Biocon@biocon.com | T: +91 80 2808 2808
W: www.biocon.com




**Confidential and Privileged :**
This message is for the designated recipient only and may contain privileged, proprietary, or otherwise private information. If you have received it in error, please notify the sender immediately and delete the original. Any other use of the e-mail by you is prohibited. Opinions, conclusions and other information in this transmission that does not relate to the official business of the company shall be understood as personal and not endorsed by the company. Any statements made herein that are not related to contractual obligations, promises, claims or commitments shall not be binding on the Company unless followed

# A STUDY ON EMPLOYEE TURNOVER IN NEEYAMO ENTERPRISES SOLUTIONS, MADURAI.

**A Project Submitted to**
**AMERICAN SCHOOL OF BUSINESS ADMINISTRATION**
**(ASBA)**

In partial fulfillment of the requirement for the Degree of

**Master of Business Administration (MBA)**

**Submitted By**

**A. HASEENA SHALI (18 MBA 207)**

**Under The Guidance Of**

**R. JACKSON GUNARAJ, MBA**

**ASSISTANT PROFESSOR, ASBA**

SINCE 1881

**THE AMERICAN COLLEGE, Madurai – 625014**
*An Autonomous Institution Affiliated to Madurai Kamaraj University*
**Re-accredited (2nd Cycle) by NAAC with Grade "A"**
**CGPA 3.46 on a 4 –point scale**

**APRIL – 2020**

NEEYAMO
HR Consulting | Technology | Operations

**Neeyamo Enterprise Solutions Pvt. Ltd.,**
Plot No. 8, 2nd Floor, Elcot IT/ITES SEZ,
Madurai Ring Road, Near Pondy Koil,
Madurai Taluk, Ilandhaikulam Village,
Madurai 625020.

CIN - U72200TN2009PTC070707

**March 23, 2020**

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. HASEENA SHALI** from **The American College** has completed her internship period with Human Resources department of **Neeyamo Enterprise Solutions** from **9th December 2019 to 9th March 2020.**

During her internship period, she has supported HR department by working with Talent Acquisition Team by engaging in all the recruitment related activities.

During the internship period her conduct was good and we wish her success for all further endeavours.

Regards,

For**Neeyamo Enterprise Solutions Pvt. Ltd.**

**Rupinder kaur**

**Associate Director, Human Capital Management**

# "SCHOOL MANAGEMENT SYSTEM USING ODOO - 13"

*Submitted By*

**B. AISHWARYA**

**(17MCA02)**

*Under Guidance Of*

**Er.N.THIRUPATHI RAJAN, M.Sc., M.Phil, PGDCA, M.Tech**

**Submitted to**

*Department of Master Of Computer Applications*

*For the partial fulfillment of the requirement of the Degree of*

**MASTER OFCOMPUTERAPPLICATIONS**

SINCE 1881

**THE AMERICAN COLLEGE, Madurai – 625002**

***(An Autonomous Institution Affiliated to Madurai Kamaraj University)***

**APRIL – 2020**

**Shorepoint**

82 Aruppukottai Road, Meenakshi Nagar, Madurai 625 012, Tamil Nadu, India Tel 91 452 267 2176 Fax 91 452 267 6271

Name : B.Aishwarya, Date:13/03/2020
Roll No :17MCA02
Department: MCA,
The American College,
Madurai.

**Internship Letter**

Dear **Aishwarya,**

We are delighted and excited to offer you an Internship at **Shorepoint Systems (P) ltd.,** with reference to your application and subsequent interviews. Your Internship period will start from **02/12/2019** and it will end on **31/03/2020** at our office.

Your Internship will be primarily focused an developing and updating new technical skills and gaining a thorough understanding of concepts through hands-on application of the knowledge that you have learned in academic.

Potential interns will get stipend as a remuneration and confirmed in the services of the company after the triumphant completion of the Internship.

By accepting this internship offer letter, you acknowledge that, you will follow our company rules, regulations, policies and practices governing the conduct of our business and employees.

We wish you the most successful intern experience with us and we are confident that you will continue to build on the good work you have started.

For Shorepoint Systems (P) Ltd.,

Sailaja

A.Sailaja

13/03/2020

# SECURE DNA REPOSITORY USING CLUSTER INTERROGATION

*Submitted By*

ARAVIND KUMAR .E

(17MCA04)

*Under Guidance Of*

Mrs.A. ANN RAMOLA JEYANTHI M.C.A., M.Phil.

*Submitted To*

Department of Master of Computer Applications

For the partial fulfillment of the requirement of the Degree of

MASTER OF COMPUTER APPLICATIONS




THE AMERICAN COLLEGE, MADURAI – 625002

ITHINKERZ

[illegible]

# Intern Completion Certificate

This is to certify that Mr. [illegible] Aravind Kumar Reg No: [illegible] MCA student of The American College has done internship at IThinkerz Techno Solutions From 6 Dec 2020 to 31 Mar 2021 on Sentiment Based Suggestions Using Cluster Determination under the guidance of Mr. Annis

We have found him to be a self starter who is motivated, duly bound and hard working. His [illegible] and his performance was Par Excellence.

[illegible] of work for him further

IThinkerz Techno Solutions

[illegible]
Manager Technical & HR
Authorized Signatory

# MOBILE VENDOR USING INVENTORY MANAGEMENT SYSTEM


*Submitted By*

**R.AthiraRaj**

**(Reg. No. 17MCA05)**

**Under Guidance Of**

**J.JohnJeyaKamarajM.SC,M.Phil,B.ED,PGDCA,B.ED,MCA,M.Phil**


**Submitted to**

**The Department of Master of computer applications**

**For the partial fulfilment of the requirement of the Degree of**

**MASTER OF COMPUTER APPLICATIONS**





**THE AMERICAN COLLEGE, MADURAI-625002**

**(An Autonomous Institution Affiliated to Madurai Kamaraj University)**


**(2019-2020)**

Scanned with CamScanner

# THE AMERICAN COLLEGE, MADURAI

(An autonomous institution affiliated to Madurai Kamaraj University)

## DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled **"MOBILE VENDOR USING INVENTORY MANAGEMENT SYSTEM"** is a bonafide record of work done by **R. Athiraraj (17 MCA 05)**, in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications, The American College,** This work has not been submitted for the award of any degree to the best of our knowledge.

**Prof J. John Jeya Kamaraj** **Er.N.Thirupathirajan**

**Internal Guide** **Director**

---

Submitted for viva-voce examination held on _____ in the Department of Master of Computer Applications, The American College, Madurai.

**Internal Examiner** **External Examiner**

**Date :**

**Place :**

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CenturyMinds

28/76 Byepass Road,
S.S. Colony,
Madurai -625010.
PH: 7200751000

# COMPLETION CERTIFICATE

This is to certify that Ms. **R. ATHIRARAJ [Reg No: 17MCA05]** who belongs to **THE AMERICAN COLLEGE, MADURAI,** In partial fulfillment of the requirements for the award of the degree of **M.C.A.** has successfully completed her project entitled **"MOBILE VENDOR USING INVENTORY MANAGEMENT SYSTEM"** using Front End as **PHP** and back End as **MYSQL** from **December 2019** to **April 2020.**

During this venture we found her highly creative and innovative in work. She carried out all the responsibilities given to her related to project, we also noted she is a fast learner and very quickly grasped the technology during the training given by our software engineers and other team professionals. She also maintained perfect attendance, her conduct and character was exemplary. She was present an all working days.

We wish all the best for her successful career.

**A. NOOR IBRAHIM B.E.,M.B.A.,**
**C.E.O.**

CENTURY MINDS
28/76, Bye Pass Road,
S.S. Colony, Madurai-10.

# SOFTWARIZATION OF INTERNET OF THINGS INFRASTRUCTURE FOR SECURE AND SMART HEALTHCARE

*Submitted By*

**K.JOSPHINE RAJATHI**

**(17MCA12)**

*Under Guidance Of*

**Prof A.ANN RAMOLA JEYANTHI, MCA, M.Phil.**

Submitted to

*The Department of Master of computer Applications*

*For the partial fulfillment of the requirement of the Degree of*

**MASTER OF COMPUTER APPLICATIONS**




**THE AMERICAN COLLEGE, MADURAI-625002**

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

April 2020

Elysium Technologies ®
Never Ends

ELYSIUM TECHNOLOGIES PRIVATE LIMITED
GST No: 33AACCE2334E1ZA
CIN No: U72200TN2006PTC060465
NASSCOM MEMBER

EGC: EPRO: 2019-2020

Date: 10/09/2020

## TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Ms K. JOSPHINE RAJATHI (Reg. No: 17MCA12)** student of **Final year MCA** from **The American College, Madurai.** She has done her project **INTERNSHIP FINAL YEAR PROJECT** title on **"SOFTWARIZATION OF INTERNET OF THINGS INFRASTURE FOR SECURE AND SMART HEALTHCARE"** in our organization **ELYSIUM TECHNOLOGIES PRIVATE LIMITED** during the period of **December 2019 to May 2020.**

We have that, during the period she has shown keen interest in her assignment and was also regular attendance.

With best regards,

R. A. Nay

ELYSIUM TECHNOLOGIES PVT. LTD.

Project Coordinator

**ELYSIUM TECHNOLOGIES PRIVATE LIMITED**

(An autonomous institution affiliated to Madurai Kamaraj University)

## DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**EMPLOYEE ONBOARDING PROCESS"** is a bonafide record of work done by **M.KOUSALYA (17 MCA 13),** in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications, The American College,** This work has not been submitted for the award of any degree to the best of our knowledge.

**Prof J. John Jeya Kamaraj** — Internal Guide

**Er.N.Thirupathirajan** — Director

---

Submitted for viva-voce examination held on _____ in the Department of Master of Computer Applications, The American College, Madurai.

**Internal Examiner**

**External Examiner**

Date :

Place :

Aparajitha

ACSL/CORE/TRG20-21/41

17.09.2020

To
Mr. John Jeya Kamaraj MCA,M.Phil.,
Lecturer
The American College (Autonomous)
Madurai - 600002

Sir,

This is to certify that **Ms. M. Kousalya (Reg No** –17MCA13),final year MCA student of your college has done her project work titled **"Employee On Boarding Process in Aparajitha Corporate Services (P) Limited"** in our Corporate office at Madurai from **3rd December 2019 to 14th March 2020.**
During the above period, her character and conduct were good.

We wish her all success in her future endeavors.

FOR APARAJITHA CORPORATE SERVICES (P) LIMITED

Regional HR

# EMPLOYEE ONBOARDING PROCESS

*Submitted by*

**M. Kousalya**

**(17MCA13)**

*Under guidance of*

**Prof J. John Jeya Kamaraj M.SC, B.Ed, PGDCA, MCA, M.Phil**

*Submitted to*

**DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS**

*for the partial fulfillment of the requirement of the*

*Degree of Master of Computer Applications*




**THE AMERICAN COLLEGE**

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

**MADURAI – 625002**

**April 2020**

# KNOWLEDGE SHARING SYSTEM ON LEARNERS


*Submitted By*

**V. MAHALAKSHMI**

**(17MCA14)**

*Under Guidance Of*

**Dr. J. Frank Reuban Jebaraj M.Sc.(Phy)., P.G.D.C.A., M.C.A., M.Phil., Ph.D.,**


*Submitted To*

**Department of Master of Computer Applications**

**For the partial fulfillment of the requirement of the Degree of**

**MASTER OF COMPUTER APPLICATIONS**





**THE AMERICAN COLLEGE, MADURAI – 625002**

**(An Autonomous Institution Affilated To Madurai Kamaraj University)**


**April 2020**

# THE AMERICAN COLLEGE, MADURAI – 625002

**(An Autonomous Institution Affilated To Madurai Kamaraj University)**

**The Department of Master of Computer Applications**

**2020**

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**KNOWLEDGE SHARING SYSTEM N LEARNERS**" is a bonafide record of word done by **MAHALAKSHMI.V(17MCA14),** in rtial fulfillment of the requirements for the award of the degree of **Master of Computer pplications of The American College.** This work has not been submitted for the award of any gree to the best of our knowledge.

**.J.Frank Reuban Jebaraj.,**
ernal Guide

**Er.N.Thirupathi Rajan.,**
Director

---

omitted for viva-voce examination held on 05-10-2020 in the Department of Master of mputer Applications, The American College, Madurai.

**TERNAL EXAMINER**

**EXTERNAL EXAMINER**

**e :**

**ce:** Madurai

Shiash
Focus on Deliverables

18th March 2020

# PROJECT COMPLETION CERTIFICATE

This is to certify that **Ms. V. MAHALAKSHMI (Reg. No. 17MCA14)** a student of **MCA.,(Master of Computer Application) The American College – Madurai** has successfully completed the project titled **"Knowledge Sharing System On Learners"** in **.NET** Platform from **December 2019 to March 2020** in our company. During the period, she had been exposed to different processes and found to be Punctual, Hard Working and Inquisitive.

We wish her every success in life and career.

For **Shiash Info Solutions Private Limited**




Ashwini Kanniyappan

Manager – Human Resources

sh Info Solutions Private Limited
Level 4, Tower A, Rattha TEK Meadows, Old Mahabalipuram Road,
ganallur, Chennai- 600 119, Tamil Nadu, India.
44 66255681 info@shiash.com

# STREAMING INFORMATION IN CIBIL SCORE TRACKER

*Submitted By*

**V. NAGARAJAN,**

**(17MCA15)**

**UNDER GUIDANCE OF**

**Mrs. A.ANN RAMOLA JEYANTHI M.C.A., M. Phil.**

**Submitted To**

***Department of Master of Computer Applications***

***For the partial fulfillment of the requirement of the Degree of***

## MASTER OF COMPUTER APPLICATIONS




**SINCE 1881**

**THE AMERICAN COLLEGE, MADURAI – 625002**

***(An Autonomous Institution Affiliated To Madurai Kamaraj University)***

**APRIL 2020**

ORIANA
Enlighten your Destin

3-April-2020

**To Whom It May Concern**

This is to certify that **V. Nagarajan, (Reg.No: 17MCA15)** MCA – Master of Computer Applications , student of **The American College** has successfully completed his project titled on " **Streaming Information in Cibil Score Tracker** " under the guidance of " Ms. J. Akila " in our company from 03-December-2019 to 31-March-2020.

All necessary details were provided from our side for the establishment of this project. We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

**Oriana Information Technologies LLP.,**

ORIANA INFORMATION TECHNOLOGIES LLP. CHENNAI

**Authorised Signature**

91 9176333393
r@orianainfotech.com
ww.orianainfotech.com

# A SEGREGATED KEY FOR AUTHORIZED DATA


**Submitted By**

**V. PRADEEP KUMAR**

**(17MCA17)**

**Under Guidance Of**

***Dr.J. FRANK REUBAN JEBARAJ M.Sc., MCA., MPhil., PGDCA., Ph.D.,***


**Submitted To**

**Department of Master of Computer Applications**

***For the partial fulfillment of the requirement of the Degree of***

**MASTER OF COMPUTER APPLICATIONS**


**THE AMERICAN COLLEGE, MADURAI – 625002**

**Autonomous Institution Affilated To Madurai Kamaraj University)**


**April 2020**

Shiash

18th March 2020

# PROJECT COMPLETION CERTIFICATE

This is to certify that **Mr. V. PRADEEP KUMAR (Reg. No. 17MCA17)** a student of **MCA.,(Master of Computer Application) The American College – Madurai** has successfully completed the project titled **"A Segregated Key For Authorized Data"** in **.NET** Platform from **December 2019 to March 2020** in our company. During the period, he had been exposed to different processes and found to be Punctual, Hard Working and Inquisitive.

We wish him every success in life and career.

For **Shiash Info Solutions Private Limited**

SHIASH INFO SOLUTIONS PRIVATE LIMITED CHENNAI 600 119

Ashwini Kanniyappan

Manager – Human Resources

# HOSPITAL NETWORK SYSTEM


**Submitted By**

**M. SAKTHI MEHARA**

**(17MCA18)**

**Under Guidance Of**

**Mrs.T. SUGANYA M.Sc., MPhil.,**


**Submitted To**

**Department of Master of Computer Applications**

**For the partial fulfillment of the requirement of the Degree of**

**MASTER OF COMPUTER APPLICATIONS**





**THE AMERICAN COLLEGE, MADURAI – 625002**

**(An Autonomous Institution Affilated To Madurai Kamaraj University)**

**April 2020**

# THE AMERICAN COLLEGE, MADURAI – 625002

**(An Autonomous Institution Affilated To Madurai Kamaraj University)**

**The Department of Master of Computer Applications**

**2020**

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**HOSPITAL NETWORK SYSTEM**" is a bonafide record of word done by **M. SAKTHI MEHARA (17MCA18),** in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications of The American College.** This work has not been submitted for the award of any degree to the best of our knowledge.

Suganya.T

**Mrs.T. Suganya**

Internal Guide

N.T

**Er.N.Thirupathi Rajan**

Director

---

Submitted for viva-voce examination held on 05.10.2020 in The Department of Master of Computer Applications, The American College, Madurai

Suganya.T

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

**Date :** 06.01.2021

**Place:** Madurai

ELYSIUM TECHNOLOGIES PRIVATE LIMITED
GST No: 33AACCE2334E1ZA
CIN No: U72200TN2006PTC060465
NASSCOM MEMBER

**EGC: EPRO: 2019-2020** **Date: 10/09/2020**

## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms **M.SAKTHI MEHARA (Reg. No: 17MCA18)** student of **Final year MCA** from **The American College, Madurai.** She has done her project **INTERNSHIP FINAL YEAR PROJECT** title on **"BUILDING HOSPITAL NETWORK SYSTEM"** in our organization **ELYSIUM TECHNOLOGIES PRIVATE LIMITED** during the period of **December 2019 to May 2020.**

We have that, during the period she has shown keen interest in her assignment and was also regular attendance.

With best regards,

ELYSIUM TECHNOLOGIES PVT LTD

Project Coordinator

**ELYSIUM TECHNOLOGIES PRIVATE LIMITED**

# ANALYSING THE FEDERATED DATA IN OPACITY


*Submitted By*

T.KARTHIKEYAN

(17MCA22)

*Under Guidance Of*

Dr. J.FRANK REUBAN JEBARAJ, M.Sc., MCA., M. Phil, PGDCA., Ph.D.,


*Submitted To*

Department of Master of Computer Applications

For the partial fulfillment of the requirement of the Degree of

MASTER OF COMPUTER APPLICATIONS





THE AMERICAN COLLEGE, MADURAI – 625002

(An Autonomous Institution Affiliated To Madurai Kamaraj University)

ORIANA
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3-April- 2020

**To Whom It May Concern**

This is to certify that **T. Karthikeyan, (Reg.No: 17MCA22)** MCA – Master of Computer Applications , student of **The American College** has successfully completed his project titled on "**Analysing the Federated Data in Opacity** " under the guidance of " Ms. J. Akila " in our company from 03-December-2019 to 31-March-2020.

All necessary details were provided from our side for the establishment of this project. We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

**Oriana Information Technologies LLP.,**

ORIANA INFORMATION TECHNOLOGIES LLP. CHENNAI

**Authorised Signature**

1 9176333393
@orianainfotech.com
ww.orianainfotech.com

A PROJECT REPORT ON

# PURSUING SYSTEMATICAL PRESCRIPT IN STASH

*Submitted By*

S.Sathyanarayanan

(17MCA23)

*Under Guidance Of*

Mrs.T. SUGANYA M.Sc., MPhil.,

*Submitted To*

Department of Master of Computer Applications

For the partial fulfillment of the requirement of the Degree of

MASTER OF COMPUTER APPLICATIONS




THE AMERICAN COLLEGE, MADURAI – 625002

(An Autonomous Institution Affiliated To Madurai Kamaraj University)

April 2020

# THE AMERICAN COLLEGE, MADURAI – 625002

**(An Autonomous Institution Affiliated To Madurai Kamaraj University)**

**The Department of Master of Computer Applications**

**2020**

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled **"PURSUING SYSTEMATICAL PRESCRIPT IN STASH"** is a bonafide record of word done by **S.SATHYANARAYANAN (17MCA23),** in partial fulfillment of the requirements for the award of the degree of Master of Computer Applications of The American College. This work has not been submitted for the award of any degree to the best of our knowledge.

Suganya.T

**Mrs.T. Suganya**

Internal Guide

N.T

**Er.N.Thirupathi Rajan**

Director

---

Submitted for viva-voce examination held on 5-10-20 in The Department of Master of Computer Applications, The American College, Madurai

Suganya.T

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

**Date :** 6.1.2021

**Place: Madurai**

SURYA INFORMATICS®

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30th March, 2020

## INTERNSHIP COMPLETION CERTIFICATE

This is to certify that **Mr. S. Sathyanarayanan (Reg. No. 17MCA23)**, MCA (Master of Computer Applications), student of **The American College - Madurai** has successfully completed the internship on the platform of **".Net"**,Title- **" Pursuing Systematical Prescript in Stash"** under the guidance of Mr. Swami Venkatesh from **12-December-2019 to 19-March-2020** in our company.

During the period, he had been exposed to different processes and found to be Punctual, Hard Working and Inquisitive. We wish him every success in life and career.

For **Surya Informatics Solutions Pvt. Ltd.,**

Navanirose S J
HR-Associate

# PHOTOGRAPHER BOOKING SYSTEM IN ANDROID

**Submitted By**

**Santhoshkumar.S**

**(17MCA26)**

***Under Guidance Of***

**Dr. J. Frank Reuban Jebaraj M.Sc.(Phy)., P.G.D.C.A., M.C.A., M.Phil., Ph.D.,**

***Submitted To***

**The Department of Master of Computer Applications**

**For the partial fulfillment of the requirement of the Degree of**

**MASTER OF COMPUTER APPLICATIONS**




**THE AMERICAN COLLEGE, MADURAI – 625002**

**(An Autonomous Institution Affiliated to Madurai Kamaraj University)**

**April 2020**

# THE AMERICAN COLLEGE, MADURAI – 625002

**(An Autonomous Institution Affiliated to Madurai Kamaraj University)**

**The Department of Master of Computer Applications**

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**PHOTOGRAPHER BOOKING SYSTEM IN ANDROID**" is a bonafide record of word done by **SANTHOSHKUMAR.S (17MCA26),** in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications of The American College.** This work has not been submitted for the award of any degree to the best of our knowledge.

**Dr. J. Frank Reuban Jebaraj.,**
Internal Guide.

**Er. N. Thirupathi Rajan.,**
Director.

---

Submitted for viva-voce examination held on 5.10.2020 in The Department of Master of Computer Applications, The American College, Madurai

**INTERNAL EXAMINER** **EXTERNAL EXAMINER**

**Date :**

**Place:** Madurai

ELYSIUM TECHNOLOGIES PRIVATE LIMITED
GST No: 33AACCE9334E1ZA
CIN No: U72300TN2008PTC080466
NASSCOM

EGC: EPRO: 2019-2020

Date: 25/04/2020

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. S.SANTHOSHKUMAR (Reg. No: 17MCA26)**student of **Final year MCA**from **The American College, Madurai.**He has done hisproject **INTERNSHIP FINAL YEAR PROJECT**title on **"PHOTOGRAPHER BOOKING SYSTEM IN ANDROID"**in our organization**ELYSIUM TECHNOLOGIES PRIVATE LIMITED**during the period of **December 2019 to April 2020.**

We have that, during the period he has shown keen interest in his assignment and was also regular attendance.

ELYSIUM TECHNOLOGIES PRIVATE LIMITED ★ MADURAI-20 ★

With best regards,

Project Coordinator

**ELYSIUM TECHNOLOGIES PRIVATE LIMITED**

452 - 4390702, 4392702
84-479-3398
info@elysiumtechnologies.com
www.elysiumtechnologies.com
227-230, Church Road, Annanagar,
Madurai-625 020, Tamilnadu, India.

# CRIME REPORTING PORTAL

*Submitted By*

**DEEPIKA.M**

**(17MCA28)**

*Under Guidance Of*

**Dr. J. Frank Reuban Jebaraj M.Sc.(Phy)., P.G.D.C.A., M.C.A., M.Phil., Ph.D.,**

*Submitted To*

**The Department of Master of Computer Applications**

**For the partial fulfillment of the requirement of the Degree of**

**MASTER OF COMPUTER APPLICATIONS**




**THE AMERICAN COLLEGE, MADURAI – 625002**

**(An Autonomous Institution Affiliated To Madurai Kamaraj University)**

**April 2020**

# THE AMERICAN COLLEGE, MADURAI – 625002

**(An Autonomous Institution Affiliated To Madurai Kamaraj University)**

**The Department of Master of Computer Applications**

**2020**

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**CRIME REPORTING PORTAL**" is a Bonafide record of word done by **DEEPIKA.M(17MCA28),** in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications of The American College.** This work has not been submitted for the award of any degree to the best of our knowledge.

**Dr.J.FrankReubanJebaraj.,**
Internal Guide.

**Er N.ThirupathiRajan.,**
Director.

---

Submitted for viva-voce examination held on 5/10/2020 in The Department of Master of Computer Applications, The American College, Madurai

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

***Date :***

**Place:** Madurai

Hitasoft™
thoughts sync with action

September 15th, 2020

**To Whomsoever It May Concern**

This is to certify that **Ms. Deepika M (Reg. No: 17MCA28)** student of **Final year MCA** from **The American College, Madurai** has successfully completed her Final year project under a **Title " Crime Reporting Portal"** in **PHP Domain** from **10.12.2019** to **18.03.2020** with our organisation.

During the project internship period the performance of her was found to be **Good** and **Satisfactory** with regular attendance.

For Hitasoft Technology Solutions Pvt Ltd

B. ThangaManikandan
Director

Hitasoft™
thoughts sync with action

September 15th, 2020

## To Whomsoever It May Concern

This is to certify that **Ms. Deepika M (Reg. No: 17MCA28)** student of **Final year MCA** from **The American College, Madurai** has successfully completed her Final year project under a **Title " Crime Reporting Portal"** in **PHP Domain** from **10.12.2019** to **18.03.2020** with our organisation.

During the project internship period the performance of her was found to be **Good** and **Satisfactory** with regular attendance.

For Hitasoft Technology Solutions Pvt Ltd

B. ThangaManikandan
Director

# THE AMERICAN COLLEGE, MADURAI – 625002

## (An Autonomous Institution Affiliated To Madurai Kamaraj University)

## The Department of Master of Computer Applications

## 2020

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**ANALYSIS OF PARALLEL IMPLEMENTATION IN PLENITUDE**" is a bonafide record of work done by **S.HERBERT (17MCA29),** in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications of The American College.** This work has not been submitted for the award of any degree to the best of our knowledge.

**Er.N.Thirupathi Rajan** **Er.N.Thirupathi Rajan**

Internal Guide Director

---

Submitted for viva-voce examination held on_____in The Department of Master of Computer Applications, The American College, Madurai

**INTERNAL EXAMINER** **EXTERNAL EXAMINER**

**Date :**

**Place:** Madurai

SURYA INFORMATICS®
Innovation Through Imagination

15th April, 2020

## INTERNSHIP COMPLETION CERTIFICATE

This is to certify that **Mr. S. Herbert (Reg. No. 17MCA29)**, MCA (Master of Computer Applications), student of **The American College - Madurai** has successfully completed the internship on the platform of **".Net"**, Title- **" Analysis of Parallel Implementation in Plenitude "** under the guidance of Mr. Swami Venkatesh from **09-January-2020 to 09-April-2020** in our company.

During the period, he had been exposed to different processes and found to be Punctual, Hard Working and Inquisitive. We wish him every success in life and career.

For **Surya Informatics Solutions Pvt. Ltd.,**

Navanirose S.J
HR-Associate

**Surya Informatics Solutions Pvt. Ltd.**
# 70/16, Sundar Bans, II Floor, 100 Feet Road, Ashok Nagar, Chennai - 600 083.
+ 91 44 4203 3355 + 91 73586 48707 hr@suryainformatics.com www.suryainformatics.com

# SELF CONFIGURING INTRUSION DETECTION SYSTEM


**Submitted By**

**R.T.ASHWIN**

**(17MCA30)**


Under Guidance Of

Dr . J. FRANK REUBAN JEBARAJ ,M.Sc., MCA., MPhil., PGDCA., Ph.D.,

Submitted To

Department of Master of Computer Applications

For the partial fulfillment of the requirement of the Degree of

MASTER OF COMPUTER APPLICATIONS



# THE AMERICAN COLLEGE, MADURAI – 625002

**(An Autonomous Institution Affiliated To Madurai Kamaraj University)**

**The Department of Master of Computer Applications**

**April 2020**

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**SELF CONFIGURING INTRUSION DETECTION SYSTEM**" is a bonafide record of word done by **R.T. ASHWIN** [17MCA30], in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications of The American College**. This work has not been submitted for the award of any degree to the best of our knowledge

Dr. J. Arputa Reuban Jebaraj.,

Dr. N. Thiruvathi rajan.,

Director

ELYSIUM TECHNOLOGIES PRIVATE LIMITED
GST No: 33AACCE2334E1ZA
CIN No: U72200TN2006PTC060465
NASSCOM MEMBER

EGC: EPRO: 2019-2020

Date: 25/04/2020

## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr.R.T.ASHWIN(Reg. No: 17MCA30)student of **Final year MCA**from **The American College, Madurai.**He has done hisproject **INTERNSHIP FINAL YEAR PROJECT** title on **"SELF CONFIGURING INTRUSION DETECTION SYSTEM"**in our organization **ELYSIUM TECHNOLOGIES PRIVATE LIMITED**during the period of **December 2019 to April 2020.**

We have that, during the period he has shown keen interest in his assignment and was also regular attendance.

ELYSIUM TECHNOLOGIES PRIVATE LIMITED ★ MADURAI-20. ★ 25 APR

With best regards,

Project Coordinator

**ELYSIUM TECHNOLOGIES PRIVATE LIMITED**

- 452 - 4390702, 4392702
- 994-479-3398
info@elysiumtechnologies.com
WWW.elysiumtechnologies.com
227-230, Church Road, Annanagar,
Madurai-625 020, Tamilnadu, India.

# CBCS COURSE REGISTRATION SYSTEM


**Submitted By**

**K. VINAYAK**

**(17MCA32)**

**Under Guidance Of**

**Mrs.T. SUGANYA M.Sc., MPhil.,**


**Submitted To**

**Department of Master of Computer Applications**

**For the partial fulfillment of the requirement of the Degree of**

**MASTER OF COMPUTER APPLICATIONS**





**THE AMERICAN COLLEGE, MADURAI – 625002**

**(An Autonomous Institution Affilated To Madurai Kamaraj University)**

**April 2020**

# THE AMERICAN COLLEGE, MADURAI – 625002

**(An Autonomous Institution Affilated To Madurai Kamaraj University)**

**The Department of Master of Computer Applications**

**2020**

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**CBCS COURSE REGISTRATION SYSTEM**" is a bonafide record of word done by **K. VINAYAK (17MCA32),** in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications of The American College.** This work has not been submitted for the award of any degree to the best of our knowledge.

Suganya.T

**Mrs.T. Suganya**

Internal Guide

**Er.N.Thirupathi Rajan**

Director

---

Submitted for viva-voce examination held on 05-10-2020 in The Department of Master of Computer Applications, The American College, Madurai

Suganya.T

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

**JUSTIN MANOHAR**, M.Com., M.Phil.
Assistant Professor, Department of Commerce
Coordinator - MCom
Additional Dean of Academic Advising
9944 00300
justinmanohar@gmail.com

Since 1881

**THE AMERICAN COLLEGE**
Madurai - 625 002
South India
+91 452 2530070, 2530071
theamericancol@gmail.com
americancollege.edu.in

28/09/2020

## TO WHOMSOEVER IT MAY CONCERN

This is to confirm that Mr. ***K. Vinayak (17 MCA 32)***, III MCA of The American College has successfully completed his project on CBCS Course Registration System for all PG and UG courses with us from December 2019 to March 2020. During the tenure, his Project Mentor was Ms. ***T. Suganya***, (Assistant Professor, Department of MCA).

His contribution to our college was highly appreciable. I wish him a grand success in life.

With regards,

JUSTIN MANOHAR
Coordinator (PG)
Department of Commerce
THE AMERICAN COLLEGE
Madurai-625 002.

# DOCUMENT DIGITIZER

*Submitted By*

**RAMYA.M**

**(17MCA33)**

*Under Guidance Of*

**Dr. J. FRANK REUBAN JEBARAJ M.Sc., P.G.D.C.A., M.C.A., M.Phil., Ph.D.,**

*Submitted To*

**The Department of Master of Computer Applications**

**For the partial fulfillment of the requirement of the Degree of**

**MASTER OF COMPUTER APPLICATIONS**




**THE AMERICAN COLLEGE, MADURAI – 625002**

**(An Autonomous Institution affilated To Madurai Kamaraj University)**

**April 2020**

# THE AMERICAN COLLEGE, MADURAI

**(An Autonomous Institution affiliated To Madurai Kamaraj University)**

**The Department of Master of Computer Applications**

**April-2020**

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**DOCUMENT DIGITIZER**" is a bonafide record of word done by **RAMYA.M (17MCA33)**, in partial fulfillment of the requirements for the award of the degree of **Master of Computer Applications of The American College.** This work has not been submitted for the award of any degree to the best of our knowledge.

**Dr.J.Frank Reuban Jebaraj.,**
Internal Guide

**Er.N.Thirupathi Rajan.,**
Director

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Submitted for viva-voce examination held on 5.10.2020 in The Department of Master of Computer Applications, The American College, Madurai

**NTERNAL EXAMINER**

EXTERNAL EXAMINER

**)ate :**

**lace :** Madurai

sify keeping you ahead

25-September-2020

## PROJECT COMPLETION LETTER

This is to confirm that Ramya Marimuthu (17MCA33), student pursuing her MCA in 'The American College', Madurai has completed her internship on "Document Digitizer" from 02.12.2019 to 20.03.2020

We wish her all the best

For **Sify Technologies Limited**

Mayuri P

**Mayuri P**
**DGM- Human Resources**

WABCO
Mobilizing Vehicle Intelligence

**WABCO INDIA LIMITED**
Plant I, Plot No. 3, (SP),
III Main Road, Ambattur Industrial Estate,
Chennai – 600 058, India.
www.wabco-auto.com
Phone : +91-44-30902600 / 42242000
Fax : +91-44-30902609 / 42242009

Dated : 07.07.2020

## Training Certificate

| | | |
|---|---|---|
| Name | : | Gayathri M |
| Designation | : | Internship Trainee |
| Department | : | Information Systems |
| From | : | 12.12.2019 |
| To | : | 19.03.2020 |
| Reason for leaving | : | Completion of training |

For **WABCO INDIA LIMITED**

**S. Manimaran,**
**General Manager - ER.**

6557299

**Internship Details:**

1. **R Abitha- 17MIC01**
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 5 th March, 2020.
2. **R Darshini 17MIC12**
    - Hands on Training Programme in Advanced Research Instrumentation organized by Bishop Heber College, Tiruchirapalli on 13th Februray 2019.
3. **Edensiya 17MIC15**
    - State Level Hands on Workshop in Molecular Diagnosis of Food Borne Pathogens by 16srRNA Sequencing (MDFPS-2020) organized by VHN Senthilkumar Nadar College, Virushunagar on 14th February 2020.
4. **H Fazil 17MIC16**
    - One day workshop on Food Technology organized by the Department of Biochemistry, The American College, Madurai on 12th September, 2017.
    - Hands on Workshop on Protein Seperation : Gel Based organized by Winro Research Institute of biological science at The American College, Madurai from 9th – 11th may 2018.
    - DBT Foldscope woekshop- 2018 organized by School of Biotechnology, Madurai Kamaraj University on 13th December, 2018.
    - Hands on Training Programme in Advanced Research Instrumentation organized by Bishop Heber College, Tiruchirapalli on 13th Februray 2019.
    - “State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 4 th April, 2019.
5. **V Iswareya Lakshimi 17MIC19**
    - Hands on Training Programme in Advanced Research Instrumentation organized by Bishop Heber College, Tiruchirapalli on 13th Februray 2019.
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 5 th March, 2020.
6. **J januja 17MIC22**
    - State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 5 th March, 2020.
    - State Level Hands on Workshop in Molecular Diagnosis of Food Borne Pathogens by 16srRNA Sequencing (MDFPS-2020) organized by VHN Senthilkumar Nadar College, Virushunagar on 14th February 2020.

7. **T N Kumaresan 17MIC31**
    - Hands on Training Programme in Advanced Research Instrumentation organized by Bishop Heber College, Tiruchirapalli on 13th Februray 2019.
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 4 th April, 2019.

- CEP course on OMICS Technologies for Life Sciences Module V: Genomics, Proteogenomics and Bioinformatics conducted by IIT Bombay during October 1-2, 2019.
- Hands on Workshop on Protein Seperation : Gel Based organized by WInro Research Institute of biological science at The American College, Madurai from 9th – 11th may 2018.

8. **J Mubina 17MIC35**
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 5th March, 2020
9. **R Poornima 17MIC40**
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 5 th March, 2020.
    - State Level Hands on Workshop in Molecular Diagnosis of Food Borne Pathogens by 16srRNA Sequencing (MDFPS-2020) organized by VHN Senthilkumar Nadar College, Virushunagar on 14th February 2020.
10. **Princy Sunira 17MIC45**
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 5 th March, 2020.
11. **S Rubika 17MIC51**
    - Hands on Training Programme in Advanced Research Instrumentation organized by Bishop Heber College, Tiruchirapalli on 13th Februray 2019.
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 5th March, 2020
12. **A Suriyakala 17MIC58**
    - State Level Hands on Workshop in Molecular Diagnosis of Food Borne Pathogens by 16srRNA Sequencing (MDFPS-2020) organized by VHN Senthilkumar Nadar College, Virushunagar on 14th February 2020.
13. **S Prithvi Srivathsava 17MIC71**
    - Hands on Workshop on Protein Seperation : Gel Based organized by Winro Research Institute of biological science at The American College, Madurai from 9th – 11th may 2018.
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 4 th April, 2019.
    - " State level hands on training cum workshop on Fundamentals of Bioinformatics" organized by PG and Research Department of Zoology, The American College, Madurai on 5 th March, 2020.

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MADURAI, TAMIL NADU, INDIA

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

## Certificate

This is to certify that R. ABITHA OF THE AMERICAN COLLEGE has attended **State level Hands on Training cum Workshop on Fundamentals of Bioinformatics**, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 05 March 2020.

| | | | |
|---|---|---|---|
| Dr. T. Angeline | Mr. K. J. Dhananjeyan | Dr. A. Joseph Thatheyus | Dr. M. Davamani Christober |
| Organizing Secretary | Organizing Secretary | Convenor | Principal and Secretary |

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Tiruchirappalli – 620 017

## HANDS ON TRAINING IN ADVANCED RESEARCH INSTRUMENTATION

# Certificate

This is to certify that Mr./Ms./Dr./Prof ..... R. Darshini ..... of

..... The American College - Madurai ..... participated

in the Hands on Training Programme in Advanced Research Instrumentation on ..... 13.02.2019 .....

at Bishop Heber College, Tiruchirappalli - 17, India.

**Co - ordinator** **Dean of Science** **Principal**

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(An Autonomous institution Affiliated to Madurai Kamaraj University - Re-accredited with 'A' Grade by NAAC)

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Jointly with

AQUACARE BIOLOGICAL PRIVATE LIMITED

## STATE LEVEL HANDS ON WORKSHOP IN MOLECULAR DIAGNOSIS OF FOOD BORNE PATHOGENS BY 16s rRNA SEQUENCING (MDFPS – 2020)

# CERTIFICATE

This is to certify that Mr/Ms/Dr S. Edershiya, Department of Microbiology, American College, Madura. has successfully completed a **State Level Hands on Workshop** in Molecular Diagnosis of Food Borne Pathogens by 16s rRNA Sequencing (MDFPS - 2020) organized by the B.Voc., Food **Safety and Quality Management & Research Department** of Microbiology, **Virudhunagar Hindu Nadars' Senthikumara Nadar College** (Autonomous), Virudhunagar, Tamilnadu on **14th February 2020.**

| Dr.R.Nagaravel | Dr.A.Balasubramanian | Dr.S.Ashok Kumar | Dr.P.Nandara Pandian |
|---|---|---|---|
| Aquacare Biological (P) Ltd. | Convener | SF Director | Principal |

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## HANDS ON TRAINING IN ADVANCED RESEARCH INSTRUMENTATION

# Certificate

This is to certify that Mr./Ms./Dr./Prof ..... H. Eazil ..... of

..... The American College - Madurai ..... participated

in the Hands on Training Programme in Advanced Research Instrumentation on ..... 13.02.2019 .....

at Bishop Heber College, Tiruchirappalli - 17, India.

**Co - ordinator** **Dean of Science** **Principal**

Since 1881

# THE AMERICAN COLLEGE

## DEPARTMENT OF IMMUNOLOGY & MICROBIOLOGY

&

## WINRO SCIENCE RESEARCH FOUNDATION

### WINRO RESEARCH INSTITUTE OF BIOLOGICAL SCIENCES

*Hands-on Workshop on*

**"PROTEIN SEPARATION: GEL BASED"**

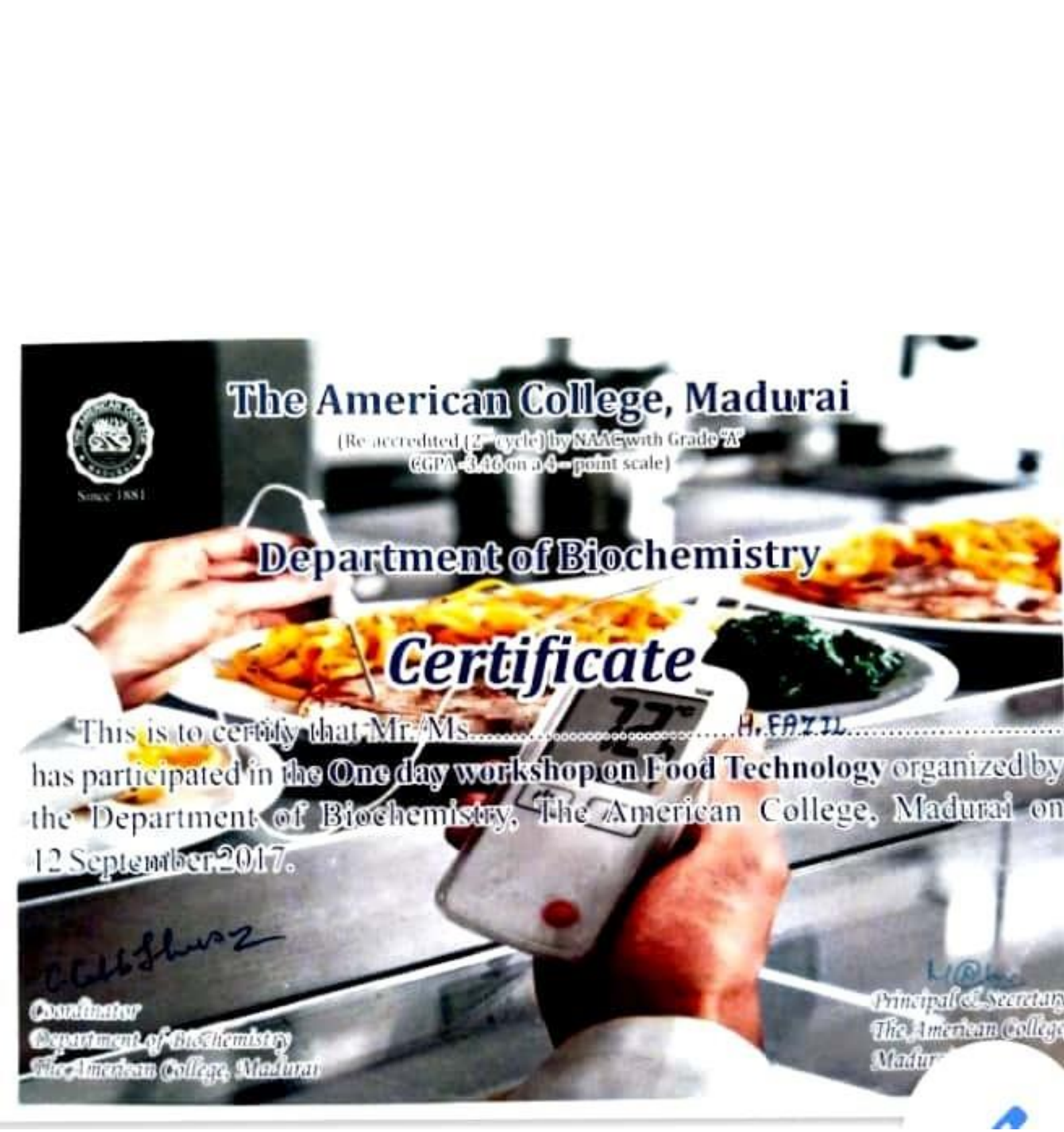
**Training Certificate**

**This is to certify that** H. FAZIL **The American College is participated as a trainee in the three days** *hands-on workshop* **on "Protein Separation: Gel based", jointly organized by Winro Research Institute of Biological Sciences, Tiruchirappalli on** *9th - 11th May, 2018* **at Department of Immunology and Microbiology, The American College, Madurai.**

**Dr. S. Muthu Selvam**
*Director - Research*
*WRIBS*
*Winro Science Research Foundation*
*Tiruchirappalli*

**Mr. M. Andrew Pradeep**
*Head - UG*
*Department of Microbiology*
*The American College*
*Madurai*

**Dr. K. Navaneethakannan**
*Director*
*Department of Immunology & Microbiology*
*The American College*
*Madurai*


The American College, Madurai
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CGPA - 3.46 on a 4 - point scale)
Since 1881
Department of Biochemistry
Certificate
This is to certify that Mr./Ms. H.FAZIL
has participated in the One day workshop on Food Technology organized by the Department of Biochemistry, The American College, Madurai on 12 September 2017.
Coordinator
Department of Biochemistry
The American College, Madurai
Principal & Secretary
The American College
Madurai

# DBT FOLDSCOPE WORKSHOP - 2018

(Under the DBT Foldscope initiative)
Department of Biotechnology
Govt. of India

# CERTIFICATE

This is to certify that Mr./Ms./Dr. H. Faxil of The American College has participated in One day **"DBT-FOLDSCOPE Workshop -2018"** sponsored by Department of Biotechnology, Govt. of. INDIA, New Delhi and Organized by School of Biotechnology, Madurai Kamaraj University on 03.12.2018.

**Dr. S. B. Anand**
**Organising Secretary**
**DBT-Foldscope**

**Dr. H. Shakila**
**Organising Secretary**
**DBT-Foldscope**

**Prof. Dr. V. Chinniah**
**Registrar**
**Madurai Kamaraj University**

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MADURAI, TAMIL NADU, INDIA

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

**Certificate**

This is to certify that H. Fazil Dept Of Microbiology has attended **Hands on Training cum Workshop on Fundamentals of Bioinformatics for Life Science Students**, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 4 April 2019.

Dr. T. Angeline

Mr. K. J. Dhananjeyan

Organizers

Dr. A. Joseph Thatheyus

Convenor

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Tiruchirappalli – 620 017

## HANDS ON TRAINING IN ADVANCED RESEARCH INSTRUMENTATION

# Certificate

This is to certify that Mr./Ms./Dr./Prof ..... L. Swarnya Lakshmi ..... of

..... The American College, Madurai ..... participated

in the Hands on Training Programme in Advanced Research Instrumentation on ..... 13.02.2019 .....

at Bishop Heber College, Tiruchirappalli - 17, India.

Co - ordinator

Dean of Science

Principal

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MADURAI, TAMIL NADU, INDIA

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

## Certificate

This is to certify that V. Iswarya Lakshmi of The American College has attended State level Hands on Training cum Workshop on Fundamentals of Bioinformatics, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 05 March 2020.

| | | | |
|---|---|---|---|
| Dr. T. Angeline<br>Organizing Secretary | Mr. K. J. Dhananjeyan<br>Organizing Secretary | Dr. A. Joseph Thatheyus<br>Convenor | Dr. M. Bavamani Christober<br>Principal and Secretary |

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MADURAI, TAMIL NADU, INDIA

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

Certificate

This is to certify that J. JANUJA OF THE AMERICAN COLLEGE has attended **State level Hands on Training cum Workshop on Fundamentals of Bioinformatics**, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 05 March 2020.

| Dr. T. Angeline | Mr. K. J. Dhananjeyan | Dr. A. Joseph Thatheyus | Dr. M. Davamani Christober |
|---|---|---|---|
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## STATE LEVEL HANDS ON WORKSHOP IN MOLECULAR DIAGNOSIS OF FOOD BORNE PATHOGENS BY 16s rRNA SEQUENCING (MDFPS – 2020)

# CERTIFICATE

This is to certify that Mr/Ms/Dr J. Janija, Department of Microbiology, American College, Madurai has successfully completed a **State Level Hands on Workshop in Molecular Diagnosis of Food Borne Pathogens by 16s rRNA Sequencing (MDFPS – 2020)** organized by the **B.Voc., Food Safety and Quality Management & Research Department of Microbiology, Virudhunagar Hindu Nadars' Senthikumara Nadar College (Autonomous),** Virudhunagar, Tamilnadu on **14th February 2020.**

| Dr.R.Singaravel | Dr.A.Balasubramanian | Dr.N.Ashok Kumar | Dr.P.Nandara Pandian |
|---|---|---|---|
| Aquacare Biological (P) Ltd. | Convener | SF-Director | Principal |

**Indian Institute of Technology Bombay**

Continuing Education &
Quality Improvement Programmes (CE & QIP)

# CERTIFICATE

This is to certify that

*Kumaresan T. N.*

has participated in the CEP course on

**OMICS Technologies for Life Sciences**
**Module-V: Genomics, Proteogenomics & Bioinformatics**

conducted by IIT Bombay during October 1 - 2, 2019

Preeti Rao
**Prof. Preeti Rao**
Professor-In-Charge (CE & QIP)

Please Scan QR Code OR type code in http://www.cep.iitb.ac.in/cep/verify/
O56-120-03

Sanjeeva Srivastava
**Prof. Sanjeeva Srivastava**
Course Coordinator

*Hands-on Workshop on*

**"PROTEIN SEPARATION: GEL BASED"**

## Training Certificate

**This is to certify that** T. N. KUMARESAN **The American College is participated as a trainee in the three days** *hands-on workshop* **on "Protein Separation: Gel based", jointly organized by Winro Research Institute of Biological Sciences, Tiruchirappalli on** *9th - 11th May, 2018* **at Department of Immunology and Microbiology, The American College, Madurai.**

**Dr. R. Muthu Selvam**
*Director - Research*
*WRIBS*
*Winro Science Research Foundation*
*Tiruchirapalli*

**Mr. M. Andrew Pradeep**
*Head - UG*
*Department of Microbiology*
*The American College*
*Madurai*

**Dr. K. Navaneethakannan**
*Director*
*Department of Immunology & Microbiology*
*The American College*
*Madurai*

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MADURAI, TAMIL NADU, INDIA

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

60 ANNIVERSARY

## Certificate

This is to certify that T.N. KUMARESAN Dept Of Microbiology has attended **Hands on Training cum Workshop on Fundamentals of Bioinformatics for Life Science Students**, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 4 April 2019.

J. Angeline
Dr. T. Angeline

K.J. Dhanamjeyan
Mr. K. J. Dhanamjeyan

Dr. A. Joseph Thatheyus

Organizers

Convenor

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Tiruchirappalli – 620 017

## HANDS ON TRAINING IN ADVANCED RESEARCH INSTRUMENTATION

# Certificate

This is to certify that Mr./Ms./Dr./Prof T. N. Kumaresan of The American College, Madurai participated in the Hands on Training Programme in Advanced Research Instrumentation on 13.02.2019 at Bishop Heber College, Tiruchirappalli - 17, India.

**Co - ordinator** **Dean of Science** **Principal**

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MADURAI, TAMIL NADU, INDIA

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

## Certificate

This is to certify that J. MUBINA OF THE AMERICAN COLLEGE has attended **State level Hands on Training cum Workshop on Fundamentals of Bioinformatics**, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 05 March 2020.

Dr. T. Angeline
Organizing Secretary

Mr. K. J. Dhananjeyan
Organizing Secretary

Dr. A. Joseph Thatheyus
Convenor

Dr. M. Davamani Christober
Principal and Secretary

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MADURAI, TAMIL NADU, INDIA

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

## Certificate

This is to certify that R. Poornima of The American College has attended **State level Hands on Training cum Workshop on Fundamentals of Bioinformatics**, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 05 March 2020.

| | | | |
|---|---|---|---|
| Dr. T. Angeline | Mr. K. J. Dhananjeyan | Dr. A. Joseph Thatheyus | Dr. M. Davamani Christober |
| Organizing Secretary | Organizing Secretary | Convenor | Principal and Secretary |

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## STATE LEVEL HANDS ON WORKSHOP IN MOLECULAR DIAGNOSIS OF FOOD BORNE PATHOGENS BY 16s rRNA SEQUENCING (MDFPS – 2020)

# CERTIFICATE

This is to certify that Mr/Ms/Dr R. Poornima, Department of Microbiology, American College, Madurai. has successfully completed a **State Level Hands on Workshop in Molecular Diagnosis of Food Borne Pathogens by 16s rRNA Sequencing (MDFPS – 2020)** organized by the **B.Voc., Food Safety and Quality Management & Research Department of Microbiology, Virudhunagar Hindu Nadars' Senthikumara Nadar College (Autonomous),** Virudhunagar, Tamilnadu on **14th February 2020.**

| Dr.R.Singaravel | Dr.A.Balasubramanian | Dr.N.Ashok Kumar | Dr.P.Sundara Pandian |
|---|---|---|---|
| Aquacare Biological (P) Ltd. | Convener | SF-Director | Principal |

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Madurai, Tamil Nadu, India

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

## Certificate

This is to certify that C. Princy Sunira of The American College has attended State level Hands on Training cum Workshop on Fundamentals of Bioinformatics, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 05 March 2020.

| Dr. T. Angeline | Mr. K. J. Dhananjeyan | Dr. A. Joseph Thatheyus | Dr. M. Davamani Christober |
|---|---|---|---|
| Organizing Secretary | Organizing Secretary | Convenor | Principal and Secretary |

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DST-FIST Sponsored College under 'College as a Whole' Scheme
Tiruchirappalli – 620 017

## HANDS ON TRAINING IN ADVANCED RESEARCH INSTRUMENTATION

# Certificate

This is to certify that Mr./Ms./Dr./Prof S. Rubika of The American College - Madurai participated in the Hands on Training Programme in Advanced Research Instrumentation on 13.02.2019 at Bishop Heber College, Tiruchirappalli - 17, India.

Co - ordinator

Dean of Science

Principal

# THE AMERICAN COLLEGE

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(Re-accredited (2nd Cycle) by NAAC with Grade of CGPA ... on a 4 point scale)
Madurai, Tamil Nadu, India

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

**Certificate**

This is to certify that S. Rubika of The American College has attended **State level Hands on Training cum Workshop on Fundamentals of Bioinformatics**, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 05 March 2020.

| Dr. T. Angeline | Mr. K. J. Dhananjeyan | Dr. A. Joseph Thatheyus | Dr. M. Bavamani Christober |
|---|---|---|---|
| Organizing Secretary | Organizing Secretary | Convenor | Principal and Secretary |

# V.H.N.SENTHIKUMARA NADAR COLLEGE

(An Autonomous institution Affiliated to Madurai Kamaraj University - Re-accredited with 'A' Grade by NAAC)

## VIRUDHUNAGAR

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B.Voc., Food Safety and Quality Management & Research Department of Microbiology

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AQUACARE BIOLOGICAL PRIVATE LIMITED

## STATE LEVEL HANDS ON WORKSHOP IN MOLECULAR DIAGNOSIS OF FOOD BORNE PATHOGENS BY 16s rRNA SEQUENCING (MDFPS – 2020)

# CERTIFICATE

This is to certify that Mr/Ms/Dr A Suriyakala, Department of Microbiology, American College, Madurai has successfully completed a **State Level Hands on Workshop in** Molecular Diagnosis of Food Borne Pathogens by 16s rRNA Sequencing (MDFPS – 2020) organized by the **B.Voc., Food Safety and Quality Management & Research Department of Microbiology, Virudhunagar Hindu Nadars' Senthikumara Nadar College (Autonomous),** Virudhunagar, Tamilnadu on **14th February 2020.**

| Dr.R.Singaravel | Dr.A.Balasubramanian | Dr.N.Ashok Kumar | Dr.P.Sundara Pandian |
|---|---|---|---|
| Aquacare Biological (P) Ltd. | Convener | SF-Director | Principal |

Since 1881

# THE AMERICAN COLLEGE

## DEPARTMENT OF IMMUNOLOGY & MICROBIOLOGY

&

## WINRO SCIENCE RESEARCH FOUNDATION

### WINRO RESEARCH INSTITUTE OF BIOLOGICAL SCIENCES

WSRF

*Hands-on Workshop on*

**"PROTEIN SEPARATION: GEL BASED"**

**Training Certificate**

**This is to certify that** S. PRITHVI **The American College is participated as a trainee in the three days** *hands-on workshop* **on "Protein Separation: Gel based", jointly organized by Winro Research Institute of Biological Sciences, Tiruchirappalli on 9th - 11th May, 2018 at Department of Immunology and Microbiology, The American College, Madurai.**

**Dr. R. Muthu Selvam**
*Director - Research*
*WRIBS*
*Winro Science Research Foundation*
*Tiruchirapalli*

**Mr. M. Andrew Pradeep**
*Head - UG*
*Department of Microbiology*
*The American College*
*Madurai*

**Dr. K. Navaneethakannan**
*Director*
*Department of Immunology & Microbiology*
*The American College*
*Madurai*

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Madurai, Tamil Nadu, India

## Postgraduate and Research Department of Zoology

### Diamond Jubilee Celebrations

## Certificate

This is to certify that C. Princy Sunira of The American College has attended **State level** Hands on Training **cum Workshop on Fundamentals of Bioinformatics**, organized by the Postgraduate and Research Department of Zoology, The American College, Madurai on 05 March 2020.

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# ISOLATION AND IDENTIFICATION OF MULTIPLE DRUG RESISTANT ESCHERICHIA COLI FROM SEWAGE TREATMENT PLANTS – MULTIPLE DRUG RESISTANT GENE SEQUENCE ANALYSIS BY BIOINFORMATICS TOOLS

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*


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# SYNTHESIS OF SILVER NANOPARTICLES AND ITS ANITMICROBIAL EFFICACY OF PADINA PAVONICA

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# ISOLATION AND IDENTIFICATION OF MEMBERS OF NORMAL MICROFLORA FROM THE LIQUID ENDOSPERM OF COCCUS NUCIFERA

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# THE EFFECT OF MOZART MUSIC ON THE GROWTH OF BACILLUS CYTOTOXICUS ACMV01 AND PSEUDOMONAS STUTZERI MTCC 3200

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# BIOCHEMICAL CHARACTERIZATION OF CHITINOLYTIC BACTERIUM FROM THE INTESTINE OF AN INSECTIVOROUS BAT, TAPHZOUS MELANOPOGAN

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*


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# ISOLATION AND IDENTIFICATION OF MULTIPLE DRUG RESISTANT COAGULASE NEGATIVE STAPHYLOCOCCUS AUREUS FROM SEWAGE TREATMENT PLANTS – MULTIPLE DRUG RESISTANT GENE SEQUENCE ANALYSIS BY BIOINFORMATICS TOOLS

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# IN-VITRO ANTIMICROBIAL ANALYSIS OF EXTRACT OF ACALYPHA INDICA LEAVES

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# EXPRESSION OF HETEROLOGOUS PROTEIN IN E.COLI TOWARDS RECOMBINANT PROTEIN PRODUCITION

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# SCREENING OF MULTIPLE DRUG RESISTANT BACTERIAL ISOLATES FROM UTI PATIENTS – MULTIPLE DRUG RESISTANT GENE SEQUENCE ANALYSIS BY BIOINFORMATICS TOOLS

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# ISOLATION AND CHARACTERIZATION OF PIGMENT PRODUCING BACTERIA FROM SOIL

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# A COMPARATIVE IN - VITRO STUDY ON ANTIUROLITHIATIC PROPERTY OF AERVA LANATA AND BRYOPHYLLUM PINNATUM

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# A STUDY ON ISOLATION AND BIOCHEMICAL CHARACTERIZATION OF ENDOPHYTIC MICROORGANISMS (BACTERIA, FUNGI AND ACTINOMYCES) FROM TURBINARIA DECURRENS.

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# ISOLATION AND IDENTIFICATION OF MULTIPLE DRUG RESISTANT VIBRIO PARAHAEMOLYTICUS FROM SEWAGE TREATMENT PLANTS – MULTIPLE DRUG RESISTANT GENE SEQUENCE ANALYSIS BY BIOINFORMATICS TOOLS.

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# IMMUNITY IN BATS : A REVIEW

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# BIODEGRADATION OF THE NEONICOTINOIDE PESTICIDE SPIROMESIFEN BY USING ISOLATED BACTERIA

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# BIOSORPTION OF NICKEL (II) BY INDIVIDUAL AND MIXED CULTURES OF BACILLUS CYTOTOXICUS ACMV01 AND PSEUDOMONAS STUTZERI MTCC 3200, AND PHYLOGENETIC CHARACTERIZATION OF BACTERIAL HEAVY METAL RESISTANCE GENE (NIKA)

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# ANTIBACTERIAL ACTIVITY OF GARLIC EXTRACT ON STAPHYLOCOCCUS AUREUS, E. COLI AND POTENTIAL DISINFECTION OF STRAWBERRIES USING PERACETIC ACID

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*


**B. PACKIYA LAKSHMI**
**(18MIM20)**


**Since 1881**


**POST GRADUATE DEPARTMENT OF IMMUNOLOGY AND MICROBIOLOGY**

**THE AMERICAN COLLEGE**

**{Re – accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4~point scale}**

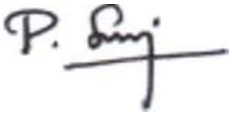
(An Autonomous Institution affiliated to Madurai Kamaraj University, Madurai)

**MADURAI-625002**


**MAY 2020**

# CERTIFICATE

This is to certify that this dissertation entitled, "**ANTIBACTERIAL ACTIVITY OF GARLIC EXTRACT ON STAPHYLOCOCCUS AUREUS, E. COLI AND POTENTIAL DISINFECTION OF STRAWBERRIES USING PERACETIC ACID"** submitted by **B.PACKIYA LAKSHMI (18MIM20)** as a partial fulfilment for the degree of Master of Science in Immunology and Microbiology based on the original work carried out by her under my guidance and supervision in the Department of Immunology and Microbiology, The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other degree



**Mrs. P. Margaret Sangeetha**
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# ANTIMICROBIAL ACTIVITY OF SYRINGODIUM ISOETIFOLIUM EXTRACTS

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*


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**MADURAI-625002**


**MAY 2020**

# CERTIFICATE

This is to certify that this dissertation entitled, "**ANTIMICROBIAL ACTIVITY OF SYRINGODIUM ISOETIFOLIUM EXTRACTS"** submitted by **S.PRAGADEESWARAN (18MIM21)** as a partial fulfilment for the degree of Master of Science in Immunology and Microbiology based on the original work carried out by him under my guidance and supervision in the Department of Immunology and Microbiology, The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other degree


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# AGROBACTERIUM MEDIATED TRANSFORMATION OF CASSIA OCCIDENTALIS TOWARDS TRANSGENIC PLANT DEVELOPMENT

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*

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**MADURAI-625002**

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# CERTIFICATE

This is to certify that this dissertation entitled, "**AGROBACTERIUM MEDIATED TRANSFORMATION OF CASSIA OCCIDENTALIS TOWARDS TRANSGENIC PLANT DEVELOPMENT"** submitted by **S.PRASANTH (18MIM22)** as a partial fulfilment for the degree of Master of Science in Immunology and Microbiology based on the original work carried out by him under my guidance and supervision in the Department of Immunology and Microbiology, The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other degree



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# ANTICANCER ACTIVITY OF PADINA PAVONICA EXTRACTS

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*


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**MADURAI-625002**


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# CERTIFICATE

This is to certify that this dissertation entitled, "**ANTICANCER ACTIVITY OF PADINA PAVONICA EXTRACTS"** submitted by **J.PRIYANKA (18MIM23)** as a partial fulfilment for the degree of Master of Science in Immunology and Microbiology based on the original work carried out by her under my guidance and supervision in the Department of Immunology and Microbiology, The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other degree





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# SURVEILLANCE OF MULTIPLE ANTIBIOTIC RESISTANT BACTERIA AMONG PATIENTS WITH UTI AND WOUND INFECTION IN MADURAI.

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*


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# CERTIFICATE

This is to certify that this dissertation entitled, "**SURVEILLANCE OF MULTIPLE ANTIBIOTIC RESISTANT BACTERIA AMONG PATIENTS WITH UTI AND WOUND INFECTION IN MADURAI."** submitted by **S.RAJALAKSHMI (18MIM24)** as a partial fulfilment for the degree of Master of Science in Immunology and Microbiology based on the original work carried out by her under my guidance and supervision in the Department of Immunology and Microbiology, The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other degree



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# BIOFILM PRODUCTION BY BACILLUS CYTOTOXICUS ACMV01 IN RESPONSE TO MANGANESE (II) AND COPPER (II) IONS, AND PHYLOGENETIC CHARACTERIZATION OF BACTERIAL HEAVY METAL RESISTANCE GENE CSOR

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*


**S.ROSHINI NILOFER**

**(18MIM25)**


**Since 1881**


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**MADURAI-625002**


**MAY 2020**

# CERTIFICATE

This is to certify that this dissertation entitled, "**BIOFILM PRODUCTION BY BACILLUS CYTOTOXICUS ACMV01 IN RESPONSE TO MANGANESE (II) AND COPPER (II) IONS, AND PHYLOGENETIC CHARACTERIZATION OF BACTERIAL HEAVY METAL RESISTANCE GENE CSOR"** submitted by **S.ROSHINI NILOFER (18MIM25)** as a partial fulfilment for the degree of Master of Science in Immunology and Microbiology based on the original work carried out by her under my guidance and supervision in the Department of Immunology and Microbiology, The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other degree



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# ANTIBACTERIAL AND ANTIOXIDANT PROPERTY OF SEAGRASS HALODULE UNINERVIS AGAINST CLINICAL ISOLATES FROM VETERINARY SAMPLES

*A Dissertation submitted to The American College, Madurai as partial fulfillment of the Degree of Master of Science in Immunology and Microbiology*


## G. SABARINATHAN

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(An Autonomous Institution affiliated to Madurai Kamaraj University, Madurai)

**MADURAI-625002**

# CERTIFICATE

This is to certify that this dissertation entitled, "**ANTIBACTERIAL AND ANTIOXIDANT PROPERTY OF SEAGRASS HALODULE UNINERVIS AGAINST CLINICAL ISOLATES FROM VETERINARY SAMPLES"** submitted by **G.SABARINATHAN (18MIM26)** as a partial fulfilment for the degree of Master of Science in Immunology and Microbiology based on the original work carried out by him under my guidance and supervision in the Department of Immunology and Microbiology, The American College, Madurai. This dissertation has not been submitted elsewhere for the award of any other degree





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**Dr. A. Joseph Thatheyus**
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# A STUDY ON CONSUMER'S SATISFACTION TOWARDS REDBUS ONLINE TICKET BOOKING SYSTEM

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application.


Researchers,

**S.A.KEERTHY (17CMC39)**
**K.KEERTHANA (17CMC38)**
**A.DHARANI (17CMC19)**
**S.YOGASRI (17CMC84)**

Under the guidance of,

**Dr. (Mrs.) T.GNANA GOWSALYA, M.Com., MBA., M.Phil., Ph.D.,**

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj University)


**Re-accredited with (2nd cycle) by NAAC with grade "A"**
**CGPA – 3.46 ON A 4 POINT SCALE**
**Madurai – 625002**

**April-2020**

**Dr.(Mrs.) T.GNANA GOWSALYA M.Com.,MBA.,M.Phil.,Ph.D.,**

Department of commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, **"A STUDY ON CUSTOMER SATISFACTION TOWARDS REDBUS ONLINE TICKET BOOKING SYSTEM"**, is a Bonafide research done by, **S.A.KEERTHY (17CMC39), A. DHARANI (17CMC19), K.KEERTHANA (17CMC38), S.YOGASRI (17CMC84)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

HEAD OF THE DEPARTMENT

**(Dr. D. KANAKAVALLI).**

INTERNAL PROJECT GUIDE

**(T.GNANA GOWSALYA)**

**PLACE:**

**DATE:**

S.A.KEERTHY (17CMC39)
K.KEERTHANA (17CMC38)
A.DHARANI (17CMC19)
S.YOGASRI (17CMC84)

**Department of Commerce (CA),**

**The American College,**

***Madurai.***

## DECLARATION

We, hereby declare that this project report entitled **"A STUDY ON CUSTOMER SATISFACTION TOWARDS REDBUS ONLINE TICKET BOOKING SYSTEM"** submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

HEAD OF THE DEPARTMENT

**Dr. D. KANAKAVALLI**

SIGNATURE OF THE RESEARCHER

S.A.KEERTHY (17CMC39) S A keerthy
K.KEERTHANA (17CMC38) K. Keerthana
A.DHARANI (17CMC19) A Dharani
S.YOGASRI (17CMC84) S. Yogasri

COUNTERSIFIED BY GUIDE

**(T.GNANA GOWSALYA)**

***PLACE:***

***DATE:***

## ACKNOWLEDGEMENT

First and foremost we thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.**DAVAMANICHIRSTOBER**, M.Sc., M.Phil. M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. **D.KANAKAVALLI**, M.Com, M.Phil., Ph.D, and DCA. for her encouragement throughout the preparation of this project.

We owe our special thanks to Dr. (Mrs.) T.GNANA **GOWSALYA**, M.Com. MBA, M.Phil., Ph.D for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally we express our heartfelt appreciation to our family members for their abundant support throughout this study.

S.A.KEERTHY (17CMC39) S.A.Keerthy
K.KEERTHANA (17CMC38) K.
A.DHARANI (17CMC19) A.Dharani
S.YOGASRI (17CMC84) S.Yogasri

# " IMPACT OF CONSUMER SATISFACTION TOWARDS FASTFOOD IN MADURAI CITY"

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of

**Bachelor of Commerce with computer application**


Researcher

| | |
|---|---|
| **G. BALA SUBRAMANIAN** | **(17cmc11)** |
| **A. HARISH KUMAR JAIN** | **(17cmc28)** |
| **A.KARTHICK RAJA** | **(17cmc35)** |
| **R. SATHESH RAJA** | **(17cmc66)** |
| **A.R. YASWANTH** | **(17cmc83)** |

Under the Guidance of

**Dr. Mrs. T. GNANA GOWSALYA, M.Com, MBA, M.Phil., Ph.D.,**

**Department of Commerce with Computer Application**

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Re-accredited with (2ND CYCLE) by NAAC with grade "A"

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Madurai-625002


APRIL-2020

Dr. Mrs. T. GNANA GOWSALLYA, M.Com , MBA, M.Phil., Ph.D.,
Department of commerce
The American College,
Madurai- 625014

## CERTIFICATE

This is to certify that this project entailed **" IMPACT OF CONSUMER SATISFACTION TOWAR DS FASTFOOD IN MADURAI CITY",** is the original work done **G. BALA SUBRAMANIAN (17cm11), A. HARISH KUMAR JAIN (17cmc28) , A. KARTHICK RAJA (17cmc35) R. SATHESH RAJA (17cmc66), A.R. YASWANTH(17cmc83)**.The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with computer application and that the project work had not previously formed the basis for the award od any Degree, Diploma, Fellowship or any other similar title

**Place: Madurai**

**Date:**

**HEAD OF THE DEPARTMENT**
**(Dr. Mrs. D. KANAKAVALLI)**

**INTERNAL PROJECT GUIDE**
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G. BALA SUBRAMANIAN (17CMC11)
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**Department of Commerce (CA),**
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## DECLARATION BY THE REARCHERES

We, here by declare that this project report entitle" **IMPACT OF CONSUMER SATISFACTION TOWAR DS FASTFOOD IN MADURAI CITY",** submitted for the award of Degree of Bachelor of Commerce with computer application is my original work and no part of this project has been used for award, diploma, fellowship or other similar title.

**Head of department**
**(DR. Mrs. D. KAANAKAVALLI)**

**Signature of the researcher**

G. Bala G. BALA SUBRAMANIAN
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# ACKNOWLEDGEMENT

Our express my sincere gratitude to Principal & Secretary of The American College, **Dr. M. DAVAMANICHRISTOBER** ,M.Sc., M.Phil., M.Ed., PGDCA., Ph.D.,(Inter Disciplinary), Ph.D.(math), for providing me an opportunity to do this project at the graduate level.

Our special thanks to head of the Department **Dr.Mrs.D.KANAKAVALLI**, M.Com., M.Phil., DCA., for providing me an opportunity to do this project at the graduate level.

Our express my deep gratitude to my guide **Dr. Mrs. T. GNANA GOWSALYA**, M.Com, MBA, M.Phil., Ph.D., her support and encouragement to do this project at the graduate level.

Our sincere thanks to our department staffs and our librarian.

Our special thanks to all the respondents for their kind Co-Operation in filling my Questionnaire.

We are lucky enough to be a student of The American College, where we have a well Provided library which has a valuable treasure of information.

Finally, the home front that support came in ocean form our family and friends who Have been a very helpful to me throughout the course of the project.

**G. BALA SUBRAMANIAN (17CMC11)**
**A. HARISH KUMAR JAIN (17CMC28),**
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**R. SATHESH RAJA (17CMC66),**
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s

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS APPOLO TYRES WITH SPECIAL REFERENCE TO MADURAI CITY

(Project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
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| **JOFFIN RAJ A.** | (17CMC32) |
| **PRAVEEN KUMAR T.** | (17CMC60) |
| **SACHIN R.** | (17CMC63) |
| **VITHAN KUMAR R.** | (17CMC82) |

Under the guidance of,

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April – 2020

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Mrs. E. Keren Judi, M.Com(CA).,M.Phil.,

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## CERTIFICATE

This is to certify that the research entitled, "A Study On Consumer's Satisfaction Towards Apollo Tyres with special reference to Madurai City", is a Bonafide research done by, **ARIVU NITHI S.(17CMC06), JOFFIN RAJ A.(17CMC32), PRAVEEN KUMAR T.(17CMC60), SACHIN R.(17CMC63) , VITHAN KUMAR R.(17CMC82)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(E. Keren Judi)

**PLACE:**

**DATE:**

s

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**Department of Commerce (CA),**

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**Madurai – 625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Apollo Tyres with special reference to Madurai City"- submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

ARIVU NITHI S.

JOFFIN RAJ A.

PRAVEEN KUMAR T.

SACHIN R.

VITHAN KUMAR R.

PLACE:

DATE:

s

## ACKNOWLEDGEMENT

First and foremost, we thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M. Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B. Com with Computer Application Dr. D. Kanakavalli, M.Com., M.Phil., Ph.D., DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. E. Keren Judi, M. Com (CA)., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# ALUMNI RECORD MANAGEMENT SYSTEM

SUBMITTED

BY


| | |
|---|---|
| ANANDH J A | (17CMC03) |
| BHAVAN KALYAN K | (17CMC12) |
| HARI VIGNESHWARAN R | (17CMC27) |
| KARTHICK M | (17CMC34) |
| PRASANNA B | (17CMC58) |


Under the guidance of

Mrs.M.GIRIJA, M.C.A., M.Phil.,

Submitted to

The Department of Computer Science(UG)

FOR THE PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF

B.Com(COMPUTER APPLICATION)




## THE AMERICAN COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with Grade "A"

MADURAI – 625002

APRIL 2020

**THE AMERICAN COLLEGE**

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Re-accredited with (2nd cycle) by NAAC with Grade "A"

MADURAI – 625002

APRIL 2020

## BONAFIDE CERTIFICATE

This is to certify that project work entitled "ALUMNI RECORD MANAGEMENT SYSTEM" is a bonafied record of work done by ANANDH.J.A(17CMC03), BHAVAN KALYAN.K(17CMC12), HARI VIGNESHWARAN.R(17CMC27), KARTHICK.M(17CMC34), PRASANNA.B(17CMC58) in partial fulfilment of the requirements for the award of the degree of B.Com(COMPUTER APPLICATION) of THE AMERICAN COLLEGE. This work has not been submitted for the award of any degree to the best of your knowledge.

M. Ginja
Internal Guide

Head of the Department

Submitted for Viva-Voice Examination, held on _____, in the Department of Computer Science, The American College, Madurai.

M. Ginja
Internal Examiner

External Examiner

Place : Madurai

Date :

# DECLARATION

I hereby declare that the project work entitled "ALUMNI RECORD MANAGEMENT SYSTEM" submitted to the Department of Computer Science, The American College affiliated to Madurai Kamaraj University in partial fulfilment of the requirements for the award of the degree of B.Com(COMPUTER APPLICATION) is a project work done by group under the guidance of Mrs.GIRIJA M.C.A., M.Phil., Lecturer, THE AMERICAN COLLEGE, Madurai. This project has not formed the basis for the award of any Degree/Diploma/Fellowship or Similar to any candidate of any university.

Place : Madurai

Date :

ANANDH J A

(17CMC03)

BHAVAN KALYAN K

(17CMC12)

HARI VIGNESHWARAN R

(17CMC24)

KARTHICK M

(17CMC34)

PRASANNA B

(17CMC58)

# ACKNOWLEDGEMENT

The merits of our project depends only on the wide panorama of the people who have devoted their precious time, and valuable suggestion as well as guidance to our project.

We are highiy obliged to our principal **Dr.M.DavamaniChristober.M.Sc.,M.Phil.,M.Ed.,PGDCA.,Ph.D.** and our **H.O.D Dr. D.Kanakavalli.M.Com.,M.Phil.,DCA.,Ph.D.** mam who passed our project as its very initial stage of planning. Also she told us to work on the project at the starting of the year. Also she told us to take the help of her if we want in our project.

I also express our gratitude toward our project guide **Mrs. M.Girija M.C.A., M.Phil.,** who has guided as well as helped from the apex of our project.

The collection of the various ideas and the progress of our project depend upon the intellectual of all the staff members in our department. I would like to express our group members who have hard work on project and made it successfully by the time of submission.

# "A STUDY ON CONSUMER SATISFACTION TOWARDS YAMAHA BIKES IN MADURAI CITY"

A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of

**Bachelor of Commerce with computer application**


Researcher

| | |
|---|---|
| **D.AAKASH** | **(17cmc01)** |
| **N.ARAVINDA KUMAR** | **(17cmc05)** |
| **D.DEVANANTH** | **(17cmc17)** |
| **J.JAYABASKARAN** | **(17cmc29)** |
| **A.MOHAMMED AFZAL** | **(17cmc50)** |

Under the Guidance of

**Mrs. E.KEREN JUDI M.Com (CA)., M.Phil.,**

**Lecturer-Management (B.com CA).**

**Department of Commerce with Computer Application**

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(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2ND CYCLE) by NAAC with grade "A"

CGPA-3.46 ON A-POINT SCALE

Madurai-625002


APRIL-2020

Mrs.E. KEREN JUDI, M.Com(CA), M.Phil.,
Department of commerce
The American College,
Madurai- 625014

## CERTIFICATE

This is to certify that this project entailed **"A STUDY OF CONSUMER SATISFACTION TOWARDS YAMAHA BIKES IN MADURAI CITY"**, is the original work done by

**D.AAKASH (17CMC01), N.ARAVINDA KUMAR (17CMC05), D.DEVANANTH (17CMC17),J.JAYABASKARAN(17CMC29), A.MOHAMMED AFZAL(17CMC50)**

The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with computer application and that the project work had not previously formed the basis for the award od any Degree, Diploma, Fellowship or any other similar title

**Place: Madurai**

**Date:**

**HEAD OF THE DEPARTMENT**

**GUIDE**

**(Dr. D. KANAKAVALLI)**

**INTERNAL PROJECT**

**(Mrs.E.KEREN JUDI)**

D.AAKASH (17cmc01)
N.ARAVINDA KUMAR (17cmc05)
D.DEVANANTH (17cmc17)
J.JAYABASKARAN (17cmc29)
A.MOHAMMED AFZAL (17cmc50)

Department of Commerce (CA),
The American College,
Madurai.

## DECLARATION BY THE REARCHERES

We, hereby declare that this project report entitle **"A STUDY ON CONSUMER SATISFACTION TOWARDS YAMAHA BIKES IN MADURAI CITY"**, submitted for the award of Degree of Bachelor of Commerce with computer application is my original work and no part of this project has been used for award, diploma, fellowship or other similar title.

**Head of department**
**(DR. D. KANAKAVALLI)**
**researcher**

**Signature of the**

D. AAKASH
N. ARAVINDHA KUMAR
D. DEVANANTH
J . JAYABASKARAN
A.MOHAMMED AFZAL

**COUNTERSIFNED BY GUIDE**

**PLACE:**

DATE:

## ACKNOWLEDGEMENT

Our express my sincere gratitude to Principal & Secretary of The American College, **Dr. M. DAVAMANI CHRISTOBER** M.Sc., M.Phil., M.Ed., PGDCA., Ph.D.,(Inter Disciplinary), Ph.D(math), for providing me an opportunity to do this project at the graduate level.

Our special thanks to head of the Departmenta **Dr. Mrs. D.KANAKAVALLI**, M.Com., M.Phil., for providing me an opportunity to do this project at the graduate level.

Our express my deep gratitude to my guide **Mrs.E. KEREN JUDI** , M.Com(CA), M.Phil, her support and encouragement to do this project at the graduate level.
Our special thanks to all the respondents for their kind Co-Operation in filling my Questionnaire.

We are lucky enough to be a student of The American College, where we have a well Provided library which has a valuable treasure of information.

Finally, the home front that support came in ocean form our family and friends who Have been a very helpful to me throughout the course of the project.

**D.AAKASH** (17cmc01)

**N.ARAVINDA KUMAR** (17cmc05)

**D.DEVANANTH** (17cmc17)

**J.JAYABASKARAN** (17cmc29)

**A.MOHAMMED AFZAL** (17cmc50)

# A STUDY ON CONUSMER'S SATISFACTION TOWARDS RELIANCE JIO NETWORK IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of commerce with computer application)


Researchers,

ARUL GRACY A. (17CMC08)

BHUVANA R. (17CMC13)

DEIVA SRI K. (17CMC16)

KARTHIKA V. (17CMC36)

KAVIYA J. (17CMC37)

Under the guidance of,

Ms. SALLY M., M.com., M.Phil.,

Assistant professor, Department of commerce (CA)

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai kamaraj University)

Re-accredited with (2cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002


April- 2020

Ms. SALLY M., M.com., M.Phil.,
Assistant professor,
Department of commerce (CA),
The American college,
Madurai – 625002

# CERTIFICATE

This is to certify that the project research entitled, "A study on consumer's satisfaction towards Reliance jio network in Madurai city ", is a Bonafide research done by, ARUL GARCY A.(17CMC08),BHUVANA R.(17CMC13),DEIVA SRI K.(17CMC16), KARTHIKA V.(17CMC36),KAVIYA J.(17CMC37) under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer application and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department
(Dr. D. Kanakavalli)

Faculty guide
(Ms. Sally M.)

PLACE:

DATE:

ARUL GRACY A (17CMC08)
BHUVANA R (17CMC13)
DEIVA SRI K (17CMC16)
KARTHIKA V (17CMC36)
KAVIYA J (17CMC37)
Department of commerce(CA)
The American college,
Madurai- 625002

## DECLARATION

We, hereby declare that this project report entitled "A Study on consumer's satisfaction towards Reliance Jio network in Madurai city" submitted for the award of degree of bachelor of commerce with computer application is our original work and no part of this project reports has been used for award, diploma, fellowship or other similar title.

SIGNATURE

ARUL GRACY A. A. Arul Gracy
BHUVANA R. R. Bhuvana
DEIVA SRI K. K. Deiva
KARTHIKA V. V. Karthika.
KAVIYA J. J. Kaviya

PLACE:

DATE:

## ACKNOWLEDGEMENT

First and foremost we lord almighty for his abundant blessings which He showered on us throughout the preparation of this project, without him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal, Dr.M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.d.,(inter Disciplinary), Ph.d.,(Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B. Com with Computer Application Dr. D. Kanakavalli, M.Com., M.Phil., Ph.d, DCA., for her encouragement throughout the preparation of this projrct

We own our special thanks to Ms. Sally M., M.Com., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind co- operation in providing your valuable responses which served as the primary data in our project.

Finally we express our heartfelt appreciation to our family members for their abundant support throughout this study.

# " IMPACT OF POSTAL SAVINGS SCHEMES IN MADURAI"

A Dissertation submitted to The American College, Madurai in Partial Fulfilment of the requirements for the Degree of

**Bachelor of commerce with Computer Application**


Researcher

D.THOMASWALKER,

K.BALAJI, S.MUTHUSARAVANA,

E.ANDREWS DURAIPANDIAN, S.KISHOREVKUMAR.

Under the Guidance of

**MRS. T.GNANA GOWSALYA, M.com, MBA, M.phil,. Ph.D,.**


**Since 1881**

**Department of Commerce with Computer Application**

**The American College**

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2ND CYCLE) by NAAC with grade "A"

CGPA-3.46 ON A 4-POINT SCALE

Madurai-625002

APRIL-2020

Dr. Mrs. T. GNANA GOWSALLYA, M.Com , MBA, M.Phil., Ph.D.,
Department of commerce
The American College,
Madurai- 625014

## CERTIFICATE

This is to certify that this project entailed " **IMPACT OF POSTAL SAVINGS SCHEMES IN MADURAI"**, is the original work done **E. ANDREWS DURAIPANDIAN (17CMC04), K. BALAJI (17CMC10),S.KISHOREKUMER(17CMC41),S.MUTHUSARAVANA(17CMC53),D.THOMASWALKER (17CMC73)**.The American College, Madurai during 2019- 2020 in partial fulfillment of the requirement for the award of the Bachelor's degree of commerce with computer application and that the project work had not previously formed the basis for the award od any Degree, Diploma, Fellowship or any other similar title

**Place: Madurai**

**Date:**

**HEAD OF THE DEPARTMENT**

**(Dr. D. KANAKAVALLI)**

**INTERNAL PROJECT GUIDE**

**(Dr. T. GNANA GOWSALYA**

E. ANDREWS DURAIPANDIAN, (17CMC04)
K. BALAJI (17CMC10)
S. KISHORE KUMAR (17CMC41)
S. MUTHU SARAVANA (17CMC53)
D. THOMASWALKER (17CMC73)
Department of Commerce (CA),
The American College,
Madurai.

## DECLARATION BY THE REARCHERES

We, hereby declare that this project report entitle" **IMPACT OF POSTAL SAVINGS SCHEMES IN MADURAI",** submitted for the award of Degree of Bachelor of Commerce with computer application is my original work and no part of this project has been used for award, diploma, fellowship or other similar title.

**Signature of the researcher**

E. ANDREWS DURAIPANDIAN 17CMC04 E. Andrews Duraipandian.

K. BALAJI 17CMC10 K. Balaji

S. KISHORE KUMAR 17CMC41 S. Kishore Kumar

S. MUTHU SARAVANA 17CMC53

D.THOMASWALKER 17CMC73 D. Thomaswalker.

COUNTERSIFNED BY GUIDE

PLACE:

DATE:

## ACKNOWLEDGEMENT

Our express my sincere gratide to Principal & Secretary of The American College, **Dr. M. DAVAMANICHRISTOBER** ,M.Sc., M.Phil., M.Ed., PGDCA., Ph.D.,(Inter Disciplinary), Ph.D., (math), for providing me an opportunity to do this project at the graduate level.

Our special thanks to head of the Department **Dr. Mrs.D.KANAKAVALLI**, M.Com., M.Phil., DCA., for providing me an opportunity to do this project at the graduate level.

Our express my deep gratitude to my guide **Dr. Mrs. T. GNANA GOWSALYA**, M.Com, MBA, M.Phil., Ph.D., her support and encouragement to do this project at the graduate level.

Our special thanks to all the respondents for their kind Co-Operation in filling my Questionnaire.

We are lucky enough to be a student of The American College, where we have a well Provided library which has a valuable treasure of information.

Finally, the home front that support came in ocean form our family and friends who Have been a very helpful to me throughout the course of the project.

**E.ANDREWS DURAI PANDIAN 17CMC04**

**K. BALAJI 17CMC10**

**S. KISHORE KUMAR 17CMC41**

**S. MUTHU SARAVANA 17CMC53**

**D. THOMASWALKER 17CMC73**

# A STUDY ON CONSUMER'S PERCEPTION TOWARDS FOOD DELIVERY APPS IN MADURAI CITY

(Project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **DHEEBATHA P.** | (17CMC20) |
| **HARI PRIYA J.** | (17CMC26) |
| **PAVITHRA G.** | (17CMC56) |
| **SANTHIYA K.** | (17CMC64) |
| **SHRUTHI H.** | (17CMC70) |

Under the guidance of,

**Mrs. N. Bairavi, M.Com., DCA., (Ph.D).,**

Assistant Professor, Department of Commerce (CA),

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj Univercity)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625 002

April – 2020

Mrs. N. Bairavi, M.Com., DCA., (Ph.D).,

Assistant Professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the research entitled, "A Study On Consumer's Perception Towards Food Delivery Apps In Madurai City", is a Bonafide research done by, **DHEEBATHA P. (17CMC20), HARI PRIYA J.(17CMC26), PAVITHRA G.(17CMC56), SANTHIYA K. (17CMC64), SHRUTHI H.(17CMC70)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(N. Bairavi)

**PLACE :**

**DATE :**

**DHEEBATHA P(17CMC20)**

**HARI PRIYA J(17CMC26)**

**PAVITHRA G(17CMC56)**

**SANTHIYA K(17CMC64)**

**SHRUTHI H(17CMC70)**

**Department of Commerce (CA),**

**The American College,**

**Madurai – 625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Perception Towards Food Delivery Apps In Madurai City"- submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

DHEEBATHA P. P. Dheebatha.
HARI PRIYA J. J. Hari priya
PAVITHRA G. G. Pthj
SANTHIYA K. K. Santhiya.
SHRUTHI H. Shruthi.H

PLACE :

DATE :

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. N. Bairavi, M.Com., DCA., (Ph.D)for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON USER'SSATISFACTION TOWARDS

## E-PAYMENT APPS

(A Project Report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with Computer Application)


**Researchers,**

| | |
|---|---|
| **Arjunan .K** | (17CMC07) |
| **Dhilip Kumar .K** | (17CMC21) |
| **Mohamed Ishak .S** | (17CMC47) |
| **RiyazKhaan .A** | (17CMC61) |
| **Vijai .M** | (17CMC76) |

Under the Supervision and Guidance of

**Mrs. N. Bairavi,** M.Com., DCA., (Ph.D)

Assistant Professor, Department of Commerce (CA),

The American College

Madurai






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002



April-2020

**Mrs. N. Bairavi,** M.Com., DCA., (Ph.D)
Assistant Professor,
Department of Commerce (CA),
The American College

## CERTIFICATE

This is to certify that the project research entitled "A Study on user'sSatisfaction towardsE-Payment Apps" is a Bonafide research done by, **Arjunan K. (17CMC07), Dhilip Kumar K. (17CMC21), Mohamed Ishak S. (17CMC47), RiyazKhaan A. (17CMC61), Vijai M. (17CMC76)**under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer application and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

**(Dr. D. Kanakavalli)**

Faculty guide

**(N. Bairavi)**

Place:

Date:

**K. Arjunan - 17CMC07**

**K. Dhilip Kumar - 17CMC21**

**S. Mohamed Ishak - 17CMC47**

**A. RiyazKhaan - 17CMC61**

**M. Vijai - 17CMC76**

Department of Commerce with Computer Application,

The American College,

Madurai - 625 002

## DECLARATION

We, hereby declare that this project report entitled "A Study on User`s Satisfaction Towards E-Payment Apps" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

**SIGNATURE OF THE RESEARCHERS**

Arjunan K.

Dhilip Kumar K.

Mohamed Ishak S. S. Mohamed Isak

RiyazKhaan A. A. Riyaz Kha.

Vijai M. M. vijai

Place:

Date:

## ACKNOWLEDGEMENT

First and foremost we thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M. Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com, M.Phil., Ph.D., DCA, for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. N.Bairavi, M.Com, DCA, (Ph.D.) for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally we express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS HERO MOTOCORP IN MADURAI CITY

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **AMRISH.P** | (17CMC02) |
| **HANSA GUHAN.U** | (17CMC25) |
| **ARUN KUMAR. P** | (17CMC09) |
| **JOHN KIRUBAKARAN.R** | (17CMC33) |
| **KIRUVESH SANDEEP. D** | (17CMC40) |

Under the guidance of,

**Mrs. N. Bairavi, M.Com., DCA., (Ph.D)**
Assistant Professor, Department of Commerce (CA),
The American College






THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002

April-2020

Mrs. N. Bairavi, M.Com., DCA., (Ph.D)
Assistant Professor, Department of Commerce (CA),
The American College,
Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Consumer's Satisfaction Towards Hero motocorp in Madurai City", is a bonafide research done by, **AMRISH.P (17CMC02), HANSA GUHAN.U (17CMC25), ARUN KUMAR.P (17CMC09), JOHN KIRUBAKARAN.R (17CMC33), KIRUVESH SANDEEP.D (17CMC40),** under my guidance in partial fulfillment of the award of bachelor's degree ofcommerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head oftheDepartment

(Dr.D.Kanakavalli)

Facultyguide

(Mrs. N.Bairavi)

**PLACE:** MADURAI

**DATE:**

**AMRISH .P** (17CMC02)
**HANSA GUHAN .U** (17CMC25)
**ARUN KUMAR .P** (17CMC09)
**JOHN KIRUBAKARAN .R** (17CMC33)
**KIRUVESH SANDEEP .D** (17CMC40),

**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Hero motocorp in Madurai City -With Special Reference to College Students In Madurai City" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

JOHN KIRUBAKARAN .R
KIRUVESH SANDEEP .D
HANSA GUHAN .U
ARUN KUMAR .P
AMRISH .P

PLACE: MADURAI

DATE:

## ACKNOWLEDGEMENT

First and foremost we thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. N. Bairavi, M.Com., DCA., (Ph.D) for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally, we express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS SUPER MARKETS WITH SPECIAL REFERENCE TO COLLEGE STUDENTS IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **JAYALAKSHMI SUDHA M.** | (17CMC30) |
| **POORNI SHOSHMA G.K.** | (17CMC57) |
| **SHALINI N.** | (17CMC67) |
| **YOGAVALLI K.** | (17CMC85) |

Under the guidance of,

Mrs. E.KEREN JUDI M.Com(CA)., M.Phil.,

Lecturer – Management (B.Com CA),

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002



April-2020

Mrs. E.Keren Judi, M.Com(CA)., M.Phil.,

Lecturer - Management (B.ComCA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Consumer's Satisfaction Towards SuperMarkets In Madurai City", is a Bonafide research done by, **JAYALAKSHMI SUDHA M.(17CMC30), POORNI SHOSHMA G.K.(17CMC57), SHALINI N.(17CMC67), YOGAVALLI K.(17CMC85)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(E. Keren Judi)

**PLACE :**

**DATE :**

**JAYALAKSHMI SUDHA M(17CMC30)**

**POORNI SHOSHMA G K(17CMC57)**

**SHALINI N(17CMC67)**

**YOGAVALLI K(17CMC85)**

**Department of Commerce (CA),**

**The American College,**

**Madurai – 625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Super Markets In Madurai City"-With Special Reference To College Students In Madurai City" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

JAYALAKSHMI SUDHA M. Jayalakshmi Sudha

POORNI SHOSHMA G.K

SHALINI N Shalini

YOGAVALLI K K. Yogavalli

PLACE:

DATE:

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. E.Keren Judi , M.Com(CA)., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER BUYING BEHAVIOR OF MOBILE PHONE IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **KOTTAI SELVAM S.** | **(17CMC42)** |
| **MOHAMMED JAMEEL J.** | **(17CMC48)** |
| **SANTHOSH RAJ C.** | **(17CMC65)** |
| **VASANTH KUMAR T.** | **(17CMC75)** |
| **VINOTH KUMAR R.** | **(17CMC79)** |

Under the supervision and guidance of,

**Ms. N. Bairavi, M.Com., DCA., (Ph.D)**

Assistant Professor, Department of Commerce (CA),
The American College



THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002

April-2020

**Ms. N. Bairavi**, M.Com., DCA., (Ph.D)

Assistant Professor,

Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study on Consumer Buying Behavior of Mobile Phone In Madurai City", is a Bonafide research done by, **KOTTAI SELVAM S.(17CMC42),MOHAMMED JAMEEL J.(17CMC48), SANTHOSH RAJ C.(17CMC65), VASANTH KUMAR T.(17CMC75),VINOTH KUMAR R.(17CMC79)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(N.Bairavi)

**PLACE :**

**DATE :**

**KOTTAI SELVAM S (17CMC42)**
**MOHAMMED JAMEEL J (17CMC48)**
**SANTHOSH RAJ C (17CMC65)**
**VASANTH KUMAR T (17CMC75)**
**VINOTH KUMAR R (17CMC79),**

**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that project report entitled "A Study on Consumer Buying Behavior of Mobile Phone with Special Reference to Madurai District", submitted for the award of Degree of Bachelor of Commerce with Computer Application is our original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

KOTTAI SELVAM S
MOHAMMED JAMEEL J
SANTHOSH RAJ C
VASANTH KUMAR T
VINOTH KUMAR R

PLACE :

DATE :

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal **Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math)** for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application **Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA.,** for her encouragement throughout the preparation of this project.

Our heartfelt thanks to my guide **Mrs. N. Bairavi, M.Com., DCA., (Ph.D)** for her immense guidance & make me to do the project enthusiastically.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CUSTOMER PREFERENCE TOWARDS APPLE IPHONE IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)

Researchers,

| | |
|---|---|
| **LEO ANTONY J.** | (17CMC43) |
| **MENON PRAISEWIN M.** | (17CMC46) |
| **SHEIK MOHAMMED S.** | (17CMC69) |
| **SIVANESAWARAN S.** | (17CMC71) |
| **YUVARAJ V.** | (17CMC86) |

Under the guidance of,

Ms. SALLY M, M.Com., M.Phil.,
Assistant Professor,
Department of Commerce (CA),
The American College

THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002

April-2020

Ms. Sally M, M.Com., M.Phil.,
Assistant Professor, Department of Commerce (CA), The
American College,
Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Customer Preference Towards Apple Iphone In Madurai City", is a Bonafide research done by, **LEO ANTONY J (17CMC43), MENON PRAISEWIN M (17CMC46), SHEIK MOHAMMED S (17CMC69), SIVANESAWARAN S (17CMC71), YUVARAJ V (17CMC86)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(Sally M)

**PLACE :**

**DATE :**

**LEO ANTONY J (17CMC43)**
**MENON PRAISEWIN M (17CMC46)**
**SHEIK MOHAMMED S (17CMC69)**
**SIVANESAWARAN S (17CMC71)**
**YUVARAJ V (17CMC86),**

**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Customer Preference Towards Apple Iphone In Madurai City - submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

**SIGNATURE**

LEO ANTONY J.
MENON PRAISEWIN M.
SHEIK MOHAMMED S.
SIVANESAWARAN S.
YUVARAJ V.

**PLACE :**

**DATE :**

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Interdisciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Ms. Sally M, M.Com., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Cooperation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS AMAZON PORTAL WITH SPECIAL REFERENCE TO MADURAI CITY

(Project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **DAVID J.** | (17CMC15) |
| **MAHAMUNI M.** | (17CMC44) |
| **MOHAMMED FAYAZ M.** | (17CMC51) |
| **SHANMUGAPRABU K.** | (17CMC68) |
| **SONA JEGA PRAVEEN M.** | (17CMC72) |

Under the guidance of,

**Mrs. E. Keren Judi M.Com(CA)., M.Phil.,**

Assistant Professor, Department of Commerce (CA),

The American College






THE AMERICAN COLLEGE

(An autonomous institution affiliated to Madurai Kamaraj Univercity)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625 002

April – 2020

Mrs. E. Keren Judi, M.Com(CA).,M.Phil.,

Assistant professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the research entitled, "A Study On Consumer's Satisfaction Towards Amazon Portal with special reference to Madurai City", is a Bonafide research done by, **DAVID J.(17CMC15), MAHAMUNI M.(17CMC44), MOHAMMED FAYAZ M.(17CMC51), SHANMUGAPRABU K.(17CMC68) , SONA JEGA PRAVEEN M.(17CMC72)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(E. Keren Judi)

**PLACE :**

**DATE :**

**DAVI J(17CMC15)**

**MAHAMUNI M(17CMC44)**

**MOHAMMED FAYAZ M(17CMC51)**

**SHANMUGAPRABU K(17CMC68)**

**SONA JEGA PRAVEEN M(17CMC72)**

**Department of Commerce (CA),**

**The American College,**

**Madurai – 625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Amazon Portal with special reference to Madurai City"- submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

DAVID J.

MAHAMUNI M.

MOHAMMED FAYAZ M.

SHANMUGAPRABU K.

SONA JEGA PRAVEEN M.

PLACE :

DATE :

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Mrs. E.Keren Judi , M.Com(CA)., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS TITAN WATCHESIN MADURAI CITY

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **DHIVAKAR M.** | **(17CMC22)** |
| **GURU A .** | **(17CMC24)** |
| **MOHAMED WASIM K.** | **(17CMC52)** |
| **RUBAN MANO JOSHUA R.** | **(17CMC62)** |
| **UDHAYA CHANDRAN M.** | **(17CMC74)** |
| **VINAYAK B .** | **(17CMC77)** |

Under the guidance of,
Ms. M.SALLY M.Com., M.Phil.,
Assistant Professor, Department of Commerce (CA),
The American College



THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)
Re-accredited with (2nd cycle) by NAAC with grade "A"
CGPA – 3.46 ON A 4 POINT SCALE
Madurai – 625002
April-2020

Ms. M. Sally, M.Com., M.Phil.,

Assistant Professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Consumer's Satisfaction Towards Titan Watches In Madurai City", is a Bonafide research done by DHIVAKAR M. (17CMC22), A. GURU (17CMC24), MOHAMED WASIM K. (17CMC52), RUBAN MANO JOSHUA R. (17CMC62) UDHAYA CHANDRAN M. (1CMC74), VINAYAK B
(17CMC77)under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(M. Sally)

**PLACE:**

**DATE :**

DHIVAKAR M. (17CMC 22)

GURU A . (17CMC24)

MOHAMED WASIM K. (17CMC52)

RUBAN MANO JOSHUA R. (17CMC62)

UDHAYA CHANDRAN M. (17CMC74)

VINAYAK B . (17CMC77)

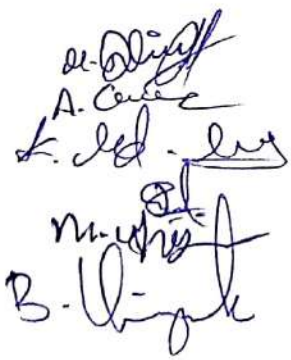
**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Titan Watches In Madurai City" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.



**SIGNATURE**
DHIVAKAR M.
GURU A.
MOHAMMED WASIM K.
RUBAN MANO JOSHUA R.
UDAYA CHANDRAN M.
VINAYAK B.

**PLACE:**
**DATE:**

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.DavamaniChristober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Ms. M.Sally, M.Com., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our qestioner

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

# A STUDY ON CONSUMER'S SATISFACTION TOWARDS ROYAL ENFIELD IN MADURAI CITY.

(A project report submitted to Madurai Kamaraj University in partial fulfillment of the requirements for the degree of Bachelor of Commerce with computer application)


Researchers,

| | |
|---|---|
| **DHAMOTHARAN M.** | (17CMC18) |
| **NIYAS SHERIFF U.** | (17CMC55) |
| **PRAVEEN KUMAR R.** | (17CMC59) |
| **VINOTH KUMAR R.** | (17CMC78) |
| **VISHAL S.** | (17CMC81) |

Under the guidance of,

Ms. M.SALLY M.Com., M.Phil.,
Assistant Professor, Department of Commerce (CA),
The American College



THE AMERICAN COLLEGE
(An autonomous institution affiliated to Madurai Kamaraj University)

Re-accredited with (2nd cycle) by NAAC with grade "A"

CGPA – 3.46 ON A 4 POINT SCALE

Madurai – 625002

April-2020

Ms. M. Sally, M.Com., M.Phil.,

Assistant Professor, Department of Commerce (CA),

The American College,

Madurai-625002

## CERTIFICATE

This is to certify that the project research entitled, "A Study On Consumer's Satisfaction Towards Royal Enfield In Madurai City", is a Bonafide research done by, **DHAMOTHARAN M.(17CMC18), NIYAS SHERIFF U.(17CMC55), PRAVEEN KUMAR R.(17CMC59), VINOTH KUMAR R.(17CMC78), VISHAL S.(17CMC81)** under my guidance in partial fulfillment of the award of bachelor's degree of commerce with computer applications and that no part of the project has been submitted before for the award of any degree, diploma, fellowship or any other title.

Head of the Department

(Dr. D. Kanakavalli)

Faculty guide

(M. Sally)

**PLACE :**

**DATE :**

**DHAMOTHARAN M (17CMC18)**
**NIYAS SHERIFF U (17CMC55)**
**PRAVEEN KUMAR R (17CMC59)**
**VINOTH KUMAR R (17CMC78)**
**VISHAL S (17CMC81),**

**Department of Commerce (CA),**

**The American College,**

**Madurai-625002**

## DECLARATION

We, hereby declare that this project report entitled "A Study on Consumer's Satisfaction Towards Royal Enfield In Madurai City -With Special Reference to College Students In Madurai City" submitted for the award of degree of bachelor of commerce with computer application is my original work and no part of this project report has been used for award, diploma, fellowship or other similar title.

SIGNATURE

DHAMOTHARAN M.
NIYAS SHERIFF U.
PRAVEEN KUMAR R.
VINOTH KUMAR R.
VISHAL S.

PLACE :

DATE :

## ACKNOWLEDGEMENT

First and foremost We thank Lord Almighty for His abundant blessings which He showered on us throughout the preparation of this project, without Him our work could not have been a success.

We wish to acknowledge our sincere gratitude to our Principal Dr. M.Davamani Christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., (Inter Disciplinary), Ph.D., (Math) for having extended all facilities in the college towards the completion of our course.

We extend our gratitude to the Head of the Department of B.Com with Computer Application Dr. D.Kanakavalli, M.Com., M.Phil., Ph.D, DCA., for her encouragement throughout the preparation of this project.

We owe our special thanks to Ms. M.Sally, M.Com., M.Phil., for her inspiring guidance and kind encouragement during the preparation till the completion of this research.

Our special thanks to all the respondents for their kind Co-operation in filling our questionnaire

Finally We express our heartfelt appreciation to our family members for their abundant support throughout this study.

T V Sundram Iyengar & Sons Private Limited

27/10/2018

## TO WHOMSOVER IT MAY CONCERN

This is to certify that **Ms B.ANNIE**, Roll No: **17MSW29** studying IInd Year **M.A (SOCIALWORK), THE AMERICAN COLLEGE** Madurai has undergone Internship Training in our organisation for exposure and understanding of Fundamental Concepts and Environment System during the period from **14.09.2019 to 17.10.2019**.

We wish her all success.

**For T V SUNDRAM IYENGAR & SONS PRIVATE LIMITED**

27/10

**ASST. MANAGER – HR & OPERATIONS**

**GHCL Limited**
(Unit: Sree Meenakshi Mills)

Date: 13/09/2019

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. R. CHANDRA BHARATHIKA( Reg.No : - 18MSW07),** second year student of MSW from The American College, Madurai has done her Project at our Yarn Division from 13th August to 13th September 2019.

During this period her code and conduct was **very good**.

We wish her all the best for her better future.

For GHCL Limited
(Unit : Sree Meenakshi Mills)

for C. 13/9.

C.NAGARAJAN
DGM - HR

Sundram Fasteners Limited
FASTENERS DIVISION
KRISHNAPURAM, AVIYUR - 626 115. INDIA.
TELEPHONE: 04566 - 250285, 04566 - 250283
Email : kpmpml@sfl.co.in
Web : www.sundram.com
PAN : AAACS8779D

19.01.2020

# CERTIFICATE

*This is to certify that* **Ms.R.Chandra Bharathika,** M.S.W. II Year, The American College, Madurai has undergone Field Work Training, at our factory for the period from 12.12.2019 to 14.01.2020

During this period, her attendance conduct and behavior were satisfactory.

We wish her all the best for her future endeavors

For **SUNDRAM FASTENERS LIMITED**

**L. PRASATH**
**ASST.GENERAL MANAGER-HR**

**PERMISSION LETTER**

FROM ORGANIZATION

Date: 12/12/19

From

**K.V.Vijaya Prakash**
**Manager – MMU,**
**HelpAge India,**
**Madurai.**

To

The Director,

Department of Social Work,

The American College,

Madurai-625 002.

Dear Sir,

Subject : Granting Permission for Block Placement -Reg

Permission granted to Mr. ~~Ms.~~ V HARI SHANKAR for Block Placement in our organization from 12th December to 14th January 20 The trainee is requested to report to The Manager, HelpAge India and take further instructions.

Yours Kindly,

Signature :

Name :

Designation:

**K.V.Vijaya Prakash**
**Manager – MMU,**
**HelpAge India,**
**Madurai.**

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Department of Social Work,
The American College, Madurai.

FORM B

*ASSESSMENT OF STUDENT PERFORMANCE IN FIELDWORK PLACEMENT –*
**MSW 5438- Block Placement for Medical & Psychiatric Social Work – Field Work.**

Name : Kezia Thomas *FIELDWORK AGENCY VERSION*

| Evaluation Criteria | Marks | Marks Allotted By Organization/Agency/Institution |
|---|---|---|
| Field work diary & General participation | 25 | 25 |
| Attendance | 25 | 25 |
| Skills , competencies & written reports | 25 | 22 |
| Report Submission | 25 | 24 |
| **Total** | 100 | 96 |

Signature: Seelan Chotta

Seal:

Name &Designation:
Asso. Prof.
Counselor & Psychotherapy
Sri Meenakshi Govt. College for Women
Madurai

Date: 29.2.2020

Dr. M. DAVAMANI CHRISTOBER
Principal & Secretary
The American College
Madurai-625 002

# HI-TECH ARAI PRIVATE LIMITED

JOINT VENTURE WITH
Arai Seisakusho Co. Ltd., Japan &
Mitsubishi Corporation, Japan

Arai-HTA
*Passion for Perfection*

14.09.2019

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Mr.P.Kishore Kumar (Reg No:18MSW18)** II year MSW(HR) student of American College, Madurai at our Uranganpatti Unit had undergone Internship Training 13th Aug 2019 to 13th Sep 2019. He has shown more interest in learning the functions of the organization and keen in observing the respective field.

His attendance was good during the training period.

**For HI-TECH ARAI PRIVATE LIMITED**

(DR.K.DURAIRAJ)
DGM – HRD / ADMN

Registered Office :
No. 33, Sarojini Street, Chinna Chokkikulam, Madurai - 625 002.
Tel : 0452 - 2536116, 2539106, 2539077, 2529956
Fax : 0452 - 2539111 e-mail : hta@hitecharai.com
CIN : U29130TN1985PTC011572 GSTIN: 33AAACH3917N1ZJ

bsi. IATF 16949 Automotive Quality Management Cert. No. 534293 | ISO 14001 Environmental Management 60163 | ISO 50001 Energy Management 667955

**BHARGAVE RUBBER PRIVATE LTD.,**
Manufacturers 'SPARK' Oil Seals 'O' Rings and MRP's.

14th January 2020

Director
American College,
Madurai

Dear Sir

This is to certify that Mr. P.Kishore Kumar (MSW 2nd Year Student) of your College has undergone Field Work Training in our organisation from 12.12.2019 to 14.1.2020.

Thanking you,

Yours faithfully,
for Bhargave Rubber Private Ltd.

(A.Lakshminarasimhan)
Director

CIN U25190TN2011PTC079484 | IEC No: 3511001285 | GSTIN :33AAECB4728K1ZO

Regd. Office : TARA GARDENS, 342-Melakkal Main Road, Kochadai, Madurai - 625 016, S.India.
Tel.No.:+91-452-2384541, 2384542
Website : www.bhargaveindustries.in E- mail : bhargave95@yahoo.com, bhargave06@yahoo.co.in

IATF 16949 : 2016 certified Company

**JOINING REPORT**

FROM STUDENT ENDORSED BY ORGANIZATION

Date: 21.12.2019

From

M. Ranjithkumar,
Community Development,
Department of Social work,
The American college, Madurai

To

The Director,

Department of Social Work,

The American College,

Madurai - 625 002.

Respected Sir,

Sub: Joining Report Intimation - Reg

With reference to the permission granted by the organization I have taken up the Block Placement in the Centre for Entrepreneurship Development (Tamilnadu, Madurai) from 12.12.19

Onwards as per the directions given by the department for the course requirement MSW 5458 – Block placement

Thanking you.

Yours sincerely,

M. Ranjithkumar

Endorsement from the organization

Name: Yaamini Dein S

Signature: Yaamini Dein S

Designation: Programme Manager, CED CTN) Madurai.

Centre for Entrepreneurship Development (Tamil Nadu)
Paddy & Flower Market Complex, Mattuthavani, MADURAI 625 007

14.01.2020

# Training Certificate

This is to certify that **Ms. K Subhasri** has undergone internship training in the **Department of Human Resources** at Apollo Speciality Hospitals, Madurai.

| | | |
|---|---|---|
| Internship period | : | 12.12.2019 to 14.01.2019 |
| Total No of Days | : | 32 days |
| No of Days Present | : | 23 days |
| No of days absent | : | 9 days |

**V. Murali Krishnan**
**Deputy General Manager – HR**

APOLLO SPECIALITY HOSPITALS ★ K.K. NAGAR, MADURAI ★ HR DEPARTMENT

Apollo Speciality Hospitals, Lake View Road, K.K. Nagar, Madurai-625 020. Tele No. : (0452)2580892 - 94, 2581148 - 50
Fax : 91-452-2580199, Email : apollo_madurai@apollohospitals.com Emergency : (0452)2581111 / 1066

Registered Office : Apollo Hospitals Enterprise Limited, No. 19, Bishop Gardens, Raja Annamalaipuram, Chennai - 600 028.
Corporate Identity Number (CIN) : L85110TN1979PLC008035

PATIENT SAFETY & QUALITY OF CARE NABH ACCREDITED

Department of Social Work,

The American College, Madurai.

FORM B

*ASSESSMENT OF STUDENT PERFORMANCE IN FIELDWORK PLACEMENT –*
**MSW 5438 Block Placement for Medical & Psychiatric Social Work – Field Work.**

Name : Arone B

***FIELDWORK AGENCY VERSION***

| Evaluation Criteria | Marks | Marks Allotted By Organization/Agency/Institution |
|---|---|---|
| Field work diary & General participation | 25 | 25 |
| Attendance | 25 | 25 |
| Skills , competencies & written reports | 25 | 24 |
| Report Submission | 25 | 24 |
| **Total** | 100 | 98 |

Signature: Rdeden Costa

Seal:

Name &Designation:
Asso. Prof.
Counselor & Psychotherapist
Sri Meenakshi Govt. college for Women
Madurai

Date: 29.2.2020

Dr. M. DAVAMANI CHRISTOBER
Principal & Secretary
The American College
Madurai-625 002

Department of Social Work,

The American College, Madurai.

Evaluation Form

*ASSESSMENT OF STUDENT PERFORMANCE IN FIELDWORK PLACEMENT* - MSW 5458
Block Placement for Development Management Social Work II - Field Work.

*FIELDWORK AGENCY VERSION*

| Evaluation Criteria | Marks | Marks Allotted By Organization/Agency/Institution |
|---|---|---|
| Maintaining Field work diary & General participation in agency related activity | 20 | 16 |
| Attendance in the agency (Each day carriers 1 mark respectively) | 30 | 24 |
| Requirements - Issues Related to Subject relevance, Subject Contextualization (Casework, Groupwork & Community Organisation Programme) | 30 | 20 |
| Skills, competencies & written reports | 20 | 14 |
| Total | 100 | 74 |

Signature:
For AROGYA AGAM
DIRECTOR

Seal:
AROGYA AGAM
THENI Dist
AUNDIPATTY - 625 512

Name &Designation:
Dr. SABU SIMON

Date: 24.01.2020

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# JOINING REPORT

## FROM STUDENT ENDORSED BY ORGANIZATION

Date: 12.12.19.

From

K. Raghu
The American college
Madurai
Master of Social work.

To

The Director,
Department of Social Work,
The American College,
Madurai - 625 002.

Respected Sir,

Sub: Joining Report Intimation - Reg

With reference to the permission granted by the organization I have taken up the Block Placement in the AROGYA AGAM, Theni From 16.12.19 to 20.1.2020,

Onwards as per the directions given by the department for the course requirement MSW 5458 – Block placement

Thanking you.

Yours sincerely,

K. Raghu

Endorsement from the organization

Name: For AROGYA AGAM

Signature: DIRECTOR

Designation: SABU MILTON SIMON

Scanned with CamScanner

Department of Social Work

The American College, Madurai.

## Evaluation Form

ASSESSMENT OF STUDENT PERFORMANCE IN FIELDWORK PLACEMENT - MSW 5458
Block Placement for Development Management Social Work II - Field Work

FIELD WORK AGENCY VERSION

| Evaluation Criteria | Marks | Marks Allotted By Organization/Agency/Institution |
|---|---|---|
| Maintaining Field work Diary & General participation in agency related activity | 20 | 19 |
| Attendance in the agency ( Each day carriers 1 mark respectively ) | 30 | 28 |
| Requirements - Issues Related to Subject relevance, Subject Contextualization ( Casework, Groupwork & Community Organisation Programme ) | 30 | 27 |
| Skills, competencies & written reports | 20 | 18 |
| Total | 100 | 92 |

Signature :

Seal :

SOCIETY FOR COMMUNITY ORGANISATION TRUST
JUSTICE BHAGWATI BHAVAN,
143, LAKE VIEW ROAD K K NAGAR
MADURAI-625 020

Name & Designation : Ms. S. SelvaGomathi,
Joint Director,
SOCO Trust, Madurai

Date : 19.1.2020

Department of Social Work,
The American College, Madurai.

FORM B

*ASSESSMENT OF STUDENT PERFORMANCE IN FIELDWORK PLACEMENT* - MSW 5477- Block Placement for Human Resource Management Social Work - Field Work.

*FIELDWORK AGENCY VERSION*

| Evaluation Criteria | Marks | Marks Allotted By Organization/Agency/Institution |
|---|---|---|
| Field work diary & General participation | 25 | 23 |
| Attendance | 25 | 25 |
| Skills , competencies & written reports | 25 | 25 |
| Report Submission | 25 | 25 |
| **Total** | 100 | 98 |

Signature:

Seal:

INTEGRATED RURAL COMMUNITY DEVELOPMENT SOCIETY
Regn-No: 16 / 1377
78-E, Madurai Road,
SIVAGANGAI - 630 561.
Tamilnadu - India.

Name &Designation: A. Seevanandam
Executive Director. IRCDS.

Date: 18.09.2019.

Scanned by CamScanner

Department of Social Work,
The American College, Madurai.

Name : R. Aruna
Roll.No : 18MSW57

Evaluation Form

*ASSESSMENT OF STUDENT PERFORMANCE IN FIELDWORK PLACEMENT* – MSW 5458
Block Placement for Development Management Social Work II – Field Work.

*FIELDWORK AGENCY VERSION*

| Evaluation Criteria | Marks | Marks Allotted By Organization/Agency/Institution |
|---|---|---|
| Maintaining Field work diary & General participation in agency related activity | 20 | 19 |
| Attendance in the agency (Each day carriers 1 mark respectively ) | 30 | 30 |
| Requirements – Issues Related to Subject relevance , Subject Contextualization (Casework, Groupwork& Community Organisation Programme ) | 30 | 28 |
| Skills , competencies & written reports | 20 | 20 |
| Total | 100 | 97 |

Signature: A Edmond

Seal: NATURAL INVESTMENT FOR LIFE ADVANCEMENT (NILA) TRUST, 78/148-MADURAI ROAD SIVAGANGAI-630 561, TAMIL NADU-S INDIA.

Name &Designation: A. Edmond Suresh, Executive Director.

Date: January 14, 2020

# A STUDY ON THE CONSUMER ATTITUDE TOWARDS RELIANCE SUPERMARKET IN MADURAI CITY

A Project Report Submitted in partial fulfilment of the requirement for degree of
**Master of Commerce**


Researcher

**S. AKCHAYADURAIPANDIAN**

**18PCO04**

Under the guidance of

**J. JUSTIN MANOHAR, M.Com., M.Phil.,**


Since 1881


**DEPARTMENT OF COMMERCE**

**THE AMERICAN COLLEGE, MADUARI – 625 002.**

(An Autonomous Institution Affiliated to Madurai Kamaraj University)
Re-accredited (2nd Cycle) by NAAC with Grade "A"
CGPA – 3.46 on a 4-point scale


**AUGUST-2020**

**J. JUSTIN MANOHAR, M.Com., M.Phil.,**

**Assistant Professor, Department of Commerce,**
**THE AMERICAN COLLEGE,**
**MADURAI-625002**

CERTIFICATE

This is to certify that the project entitle "**A Study on The Consumer Attitude towards Reliance Supermarket in Madurai City**" submitted by ***S. AKCHAYADURAIPANDIAN*** (18PCO04) in partial fulfilment of the requirement for the degree of **Master of Commerce in** The American College, Madurai is done by him during the period of 2018-2020, under my guidance and this report or any part thereof has not been submitted elsewhere for the award of any other degree.

***(J. JUSTIN MANOHAR, M.Com., M.Phil.,)***

PLACE: MADURAI

DATE: 1.10.2020

COUNTERSIGED BY

**(J. JUSTIN MANOHAR, M. Com., M. Phil.,)**
**Head, Department of Commerce (PG)**

**S. AKCHAYADURAIPANDIAN**

18PCO04 - M. Com.,
DEPARTMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI - 625002

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A study on the Consumer Attitude towards Reliance Supermarket in Madurai City"** submitted for the degree of Master of Commerce is my original work and no part of the project has been submitted for the award of any degree, diploma, fellowship or other similar titles.

Signature of the Researcher

**(S. AKCHAYADURAIPANDIAN)**

**Signature of The Guide**

**(J. JUSTIN MANOHAR, M. Com, M. Phil.,)**

**PLACE: MADURAI**

**DATE:** 1.10.2020

## ACKNOWLEDGEMENT

First and foremost would like to thank God, The Almighty for giving us his blessing to do this project.

I would like to express my sincere thanks to my respected and beloved **Principal Dr. M. DAVAMANI CHRISTOBER M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., Ph. D.,** I present my thanks to the management of our esteemed institution for providing me the opportunity to work on this topic.

I am grateful to **Dr. A. MARTIN DAVID, M. Com, M.Phil., Ph. D.,** head of the department of commerce for giving me the opportunity to do this project and offering valuable suggestions.

I would like to express my profound gratitude and indebtedness to my esteemed guide **J. JUSTIN MANOHAR, M.Com., M.Phil.,** Coordinator of Commerce (PG), The American College, Madurai. I am really proud of being research student of him. This project would have been possible but steady and constant guidance, supervision and encouragement.

I extent my sincere thanks to the respondents who extended their fullest cooperation and help to complete this work.

I wish to express my deepest and heartfelt thanks to my beloved parents and other members of my family for the support, prayers and constant encouragement extended to me during the period of research work.

I remember with gratitude all my friends and well- wishers who have in some way or other contributed to the accomplishment of this study.

***S. AKCHAYADURAIPANDIAN (18PCO04)***

# A STUDY ON CONSUMER PREFERENCE TOWARDS INSTANT FOOD PRODUCTS IN MADURAI CITY

**A project report submitted to the American college, Madurai in partial Fulfillment of the requirements for the degree of master of commerce**


**Researcher**

**V.HARIDHA**

**(18PCO13)**

**Under the guidance of**

**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**






**SINCE 1881 DEPATRTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

**(An Autonomous institution Affiliated to Madurai Kamarajar University)**

**Re –accredited (2nd cycle) by NAAC with grade "A"**

**CGPA -3.46 on a 4 POINT SCALE**

**MADURAI – 625002**

**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**


**AUGUST - 2020**

**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**

**ASSISTANT PROFESSOR- MANAGEMENT,**

**DEPARTMENT OF COMMERCE,**

**THE AMERICAN COLLEGE,**

**MADURAI-625002**

# CERTIFICATE

This is to certify that the project entitled **"A STUDY ON CONSUMER PREFERENCE TOWARDS INSTANT FOOD PRODUCTS IN MADURAI CITY"** submitted by **V.HARIDHA** (18PCO13) in partial fulfillment of the requirement for the degree of **MASTER OF COMMERCE**, The American college, Madurai is done by him during period 2018-2020 under my guidance and this report or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai,

Date: 1.10.2020

Signature of the Guide

**COUNTERSIGNED BY**

**(MR.J. JUSTIN MANOHAR)**

Coordinator M.Com,

Department of commerce

**V.HARIDHA (18 PCO 13)**

**Department of commerce,**

**The American college,**

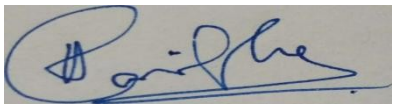
**Madurai – 625002**

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A STUDY ON CONSUMER PREFERENCE TOWARDS INSTANT FOOD PRODUCTS IN MADURAI CITY"** submitted for the degree of **MASTER OF COMMERCE** is my original work and no part of project report has been submitted for the award of any other Degree, Diploma, Fellowship or other similar titles.

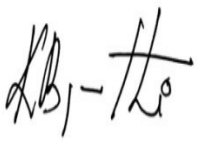
Place: Madurai

Date: 1.10.2020



Signature of the Researcher

**(V.HARIDHA)**



Signature of The Guide :

# ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning the names of people who made it possible, whose constant guidance and encouragement crowns all efforts with our success.

First and foremost, I thank God for showering the blessing over myself throughout the year to finish my project successfully.

I would like to express my sincere thanks to my respected and beloved Principal **Dr. M. DAVAMANI CHRISTOBER M.sc., M.Phi1., M.Ed., PGDCA., Ph.D.,** I present my thanks to the management of our esteemed institution for providing me the opportunity to work on the topic.

I extend my deep gratitude to our Head of Department **Dr. A. MARTIN DAVID M.Com, M.Phil. PhD,** for providing me an opportunity to do this project at the post graduate level.

I extend my deep gratitude to our coordinate of department PG commerce **Prof. J. JUSTIN MANOHAR M.Com., M.Phi1.,** Coordinator of commerce (PG) For encouraging us and giving us the freedom to use our own ideas in doing the project.

I would like to express my profound thanks to **Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,** for his meticulous supervision, constant inspiration and invaluable guidance throughout the course of the project.

I express my thanks to my friends for entire support and encouragement in this project.

My special thanks to all the respondents for their kind co — operation in filling my questionnaire.

I am lucky enough to be a student of The American College where we have a well provided Daniel poor Memorial Library which has valuable treasure of information.

Finally and more important I am deeply indebted to my parents, family members and friends for their constant encouragement and moral support throughout my research endeavor. There are many other who have helped me directly and indirectly to complete this research work. I thank them all wholeheartedly

**V.HARIDHA**
**(18PCO13)**

# A STUDY ON CUSTOMER SATISFACTION TOWARDS E-BANKING SERIVICES OF CANARA BANK IN MADURAI CITY

**A project report submitted to the American college, Madurai in partial Fulfillment of the requirements for the degree of master of commerce**


**Researcher**

**T.PRABHA**

**(18PCO27)**

**Under the guidance of**

**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**






**SINCE 1881 DEPATRTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

**(An Autonomous institution Affiliated to Madurai Kamarajar University)**

**Re –accredited (2nd cycle) by NAAC with grade "A"**

**CGPA -3.46 on a 4 POINT SCALE**

**MADURAI – 625002**

**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**


**AUGUST - 2020**

**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**

**ASSISTANT PROFESSOR- MANAGEMENT,**

**DEPARTMENT OF COMMERCE,**

**THE AMERICAN COLLEGE,**

**MADURAI-625002**

# CERTIFICATE

This is to certify that the project entitled **"A STUDY ON CUSTOMER SATISFACTION TOWARDS E-BANKING SERIVICES OF CANARA BANK IN MADURAI CITY"** submitted by **T.PRABHA** (18PCO27) in partial fulfillment of the requirement for the degree of **MASTER OF COMMERCE**, The American college, Madurai is done by him during period 2018-2020 under my guidance and this report or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai, Signature of the Guide

Date: 1.10.2020

**COUNTERSIGED BY**

**(MR.J. JUSTIN MANOHAR)**

Coordinator M.Com,

Department of commerce

**T.PRABHA (18 PCO 27)**

**Department of commerce,**

**The American college,**

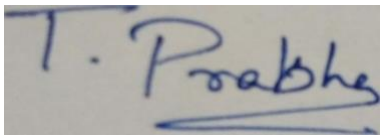
**Madurai – 625002**

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A STUDY ON CUSTOMER SATISFACTION TOWARDS E-BANKING SERIVICES OF CANARA BANK IN MADURAI CITY"** submitted for the degree of **MASTER OF COMMERCE** is my original work and no part of project report has been submitted for the award of any other Degree, Diploma, Fellowship or other similar titles.

Place: Madurai

Date: 1.10.2020



Signature of the Researcher

**(T.PRABHA)**



Signature of The Guide :

# ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning the names of people who made it possible, whose constant guidance and encouragement crowns all efforts with our success.

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I extend my deep gratitude to our coordinate of department PG commerce **Prof. J. JUSTIN MANOHAR M.Com., M.Phi1.,** Coordinator of commerce (PG) For encouraging us and giving us the freedom to use our own ideas in doing the project.

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Finally and more important I am deeply indebted to my parents, family members and friends for their constant encouragement and moral support throughout my research endeavor. There are many other who have helped me directly and indirectly to complete this research work. I thank them all wholeheartedly

**T.PRABHA**
**(18PCO27)**

# A STUDY ON QUALITY OF SERVICE PROVIDED BY RESORTS IN KUMILY CITY

A project report submitted to The American College, Madurai in partial fulfillment of the requirements for the degree of Master of Commerce


**Submitted by**

**PREETHY BABU**

**(18PCO28)**

**Under the Guidance of**

**Dr. D. KANAKAVALLI, M.COM., M.Phil., Ph.D., DCA**


Since 1881


**DEPARTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

(An Autonomous Institution Affiliated to Madurai Kamarajar University)

**Re-accredited with (2nd cycle) by NAAC with Grade "A"**

**CGPA-3.46 on A 4 POINTSCALE**

**MADURAI- 625002**


**AUGUST 2020**

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Dr. D. KANAKAVALLI, M.COM., M.Phil., DCA., Ph.D.,

COORDINATOR, B.COM (CA),

DEPARTMENT OF COMMERCE,

THE AMERICAN COLLEGE,

MADURAI – 625002

## CERTIFICATE

This is to certify that the project entitled **"A STUDY ON QUALITY OF SERVICE PROVIDED BY RESORTS IN KUMILY CITY"** submitted by **(18PCO28)** in partial fulfilment of the requirement for the degree of **MASTER OF COMMERCE,** The American College, Madurai during 2019-2020, under my guidance and supervision and this project or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai

Date: 19.8.2020

Signature of the guide

05/10/2020

**(Dr. D. KANAKAVALLI)**

(DR. J. JUSTIN MANOHAR)

Co-ordinator,

Department of commerce (PG)

J.JUSTIN MANOHAR
Coordinator (PG)
Department of Commerce
THE AMERICAN COLLEGE
Madurai-625 002.

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**PREETHY BABU**

**(18PCO28)**

**Department of commerce,**

**The American College,**

**Madurai-625002**

## DECLARATION

I hereby declare that the project titled **"A STUDY ON QUALITY OF SERVICE PROVIDED BY RESORTS IN KUMILY CITY"** submitted for the degree of **MASTER OF COMMERCE** is my original work and no part of project report has been submitted for the award of any other Degree, Diploma, Fellowship or other similar titles.

Place: Madurai

Date: 19.8.2020

Student's Signature

Preethy babu

Counter Signed By:

05/10/2020

**Dr. D. KANAKAVALLI** (PROJECT GUIDE)

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## ACKNOWLEDGMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning the names of people who made it possible, whose constant guidance and encouragement crowns all efforts with our success.

First foremost I thank God for showering the blessing over myself throughout the year to finish my project successfully.

I would like to express my profound thanks to my guide **Dr. D. KANAKAVALLI, M.COM., M.Phil., Ph.D., DCA** for her meticulous supervision, constant inspiration and invaluable guidance throughout the course of the project.

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I extend my deep gratitude to our Coordinator of department PG department of commerce **Dr. J. JUSTIN MANOHAR M.Com., M.Phil.,** for encouraging us and giving us the freedom to use our own ideas in doing the project. I sincerely thank him for being instrumental in helping us in using the SPSS software.

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Finally and more importantly I am deeply indebted to my parents, family members and friends for their constant encouragement and moral support throughout my research endeavor.

There are many other who have helped me directly and indirectly to complete this research work. I thank them all whole- heartedly.

**PREETHY BABU**
**( 18PCO28 )**

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# A STUDY ON CUSTOMER SATISFICATION TOWARDS JIO FIBER INTERNET SERVICE PROVIDER IN MADURAI CITY

A project report submitted to The American College, Madurai in partial fulfillment of the requirements for the degree of Master of Commerce


**Submitted by**

**J. PRIYANKA**

**(18PCO29)**

**Under the Guidance of**

**Dr. D. KANAKAVALLI, M.COM., M.Phil., Ph.D.,DCA**


Since 1881


**DEPARTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

(An Autonomous Institution Affiliated to Madurai Kamarajar University)

**Re-accredited with (2nd cycle) by NAAC with Grade "A"**

**CGPA-3.46 on A 4 POINTSCALE**

**MADURAI- 625002**


**AUGUST 2020**

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**Dr. D. KANAKAVALLI, M.COM., M.Phil., Ph.D.,DCA**

**CO-ORDINATOR, B.COM (CA),**

**DEPARTMENT OF COMMERCE,**

**THE AMERICAN COLLEGE,**

**MADURAI – 625002**

## CERTIFICATE

This is to certify that the project entitled **"A STUDY ON CUSTOMER SATISFICATION TOWARDS JIO FIBER INTERNET SERVICE PROVIDER IN MADURAI CITY"** submitted by **J.PRIYANKA (18PCO29)** in partial fulfillment of the requirement for the degree of **MASTER OF COMMERCE,** The American College, Madurai during 2019-2020, under my guidance and supervision and this project or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai

Date:19.8.2020

Signature of the research guide

05/10/2020

**(Dr.D. KANAKAVALLI )**

(MR. J. JUSTIN MANOHAR)

Co-ordinator,

Department of commerce (PG)

**J.JUSTIN MANOHAR**
Coordinator (PG)
Department of Commerce
THE AMERICAN COLLEGE
Madurai-625 002.

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J. PRIYANKA

(18PCO29)

Department of Commerce,

The American College,

Madurai-625002

## DECLARATION

I hereby declare that the project titled **"A STUDY ON CUSTOMER SATISFICATION TOWARDS JIO FIBER INTERNET SERVICE PROVIDER IN MADURAI CITY"** submitted for the degree of **MASTER OF COMMERCE** is my original work and no part of project report has been submitted for the award of any other Degree, Diploma, Fellowship or other similar titles.

Place: Madurai

Date:19.8.2020

Student's Signature

J. Priyanka

Counter Signed By:

05/10/2020

**Dr.D. KANAKAVALLI (RESEARCH GUIDE)**

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# A STUDY ON CUSTOMER SATISFACTION TOWARDS ROYAL ENFIELD WITH SPECIAL REFERENCE TO MADURAI CITY.

A project report submitted to the American college,Madurai in partial fulfillment of the requirements for the degree of master of commerce


Researcher

R.SARANYA

(18PCO36)

Under the guidance of

Dr.R.MANIKANDAN, M.com, MBA, M.Phil., PhD..,


Since 1881

**DEPATRTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

(An autonomous institution Affiliated to Madurai Kamarajar University)

Re –accredited (2nd cycle) by NAAC with grade "A"CGPA -3.46 on a 4 point scale

Madurai – 625002

**AUGUST-2020**

Dr. R. MANIKANDAN, M.COM, MBA, M.Phil., Ph.D.,

Assistant Professor, department of commerce,
THE AMERICAN COLLEGE,
MADURAI-625002

## CERTIFICATE

This is to certify the project entitle "A STUDY ON CUSTOMER SATISFACTION TOWARDS ROYAL ENFIELD WITH SAPECIAL REFERENCE TO MADURAI CITY" submitted by R.SARANYA (18 PCO 36) in partial fulfilment of the requirement for the degree of MASTER OF COMMERCE in American college, Madurai is done by him during the period of 2018 – 2020, under my guidance and this report or any thereof has not been submitted elsewhere for the award of ant other degree.

Signature of the guide

PLACE: MADURAI

DATE:

COUNTERSIGED BY

(Mr. J. JUSTIN MANOHAR)
Coordinator M.Com,
Department of commerce

J.JUSTIN MANOHAR
Coordinator (PG)
Department of Commerce
THE AMERICAN COLLEGE
Madurai-625 002.

R.SARANYA (18 PCO 36)

DEPARTMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI - 625002

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled "A STUDY ON CUSTOMER SATISFACTION TOWARDS ROYAL ENFIELD WITH SAPECIAL REFERENCE TO MADURAI CITY" submitted for the degree of Master of Commerce is my original work and no part of the project has been submitted for the award of any degree, diploma, fellowship or other similar titles.

R. Saranya.

Signature of the Researcher

(R.SARANYA)

R. M

**Signature of the Guide**

**(Dr. R. MANIKANDAN, M.COM, MBA, M.Phil., Ph.D.,)**

**PLACE: MADURAI**

**DATE:**

# ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning the names of people who made it possible, whose constant guidance and encouragement crowns all efforts with our success.

First and foremost, I thank God for showering the blessing over myself throughout the year to finish my project successfully.

I would like to express my sincere thanks to my respected and beloved Principal **Dr. M. DAVAMANI CHRISTOBER M.Sc., M.Phil., M.Ed., PGDCA., Ph.D.,** I present my thanks to the management of our esteemed institution for providing me the opportunity to work on the topic.

I extend my deep gratitude to our Head of Department **Dr. A. MARTIN DAVID M.Com, M.Phil. PhD.D.,** for providing me an opportunity to do this project at the post graduate level.

I extend my deep gratitude to our coordinate of department PG commerce **MR. J. JUSTIN MANOHAR M.Com., M.Phil**., Coordinator of commerce (PG) For encouraging us and giving us the freedom to use our own ideas in doing the project.

I would like to express my profound thanks to **Dr.R.MANIKANDAN, M.Com, MBA, M.Phil., PhD..,** for his meticulous supervision, constant inspiration and invaluable guidance throughout the course of the project.

I express my thanks to my friends for entire support and encouragement in this project.

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**R.SARANYA (18PCO36)**

# A study on owner's preference towards online food ordering system in Madurai city with special reference to zomato

A project report submitted to The American College, Madurai in partial fulfillment of the requirements for the degree of Master of Commerce


**Submitted by**

**K.Vidhya**

**(18PCO42)**

**Under the Guidance of**

**Dr. D. KANAKAVALLI, M. Com, M.Phil., Ph.D.,**


Since 1881


**DEPARTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

(An Autonomous Institution Affiliated to Madurai Kamarajar University)

**Re-accredited with (2nd cycle) by NAAC with Grade "A"**

**CGPA-3.46 on A 4 POINTSCALE**

**MADURAI- 625002**


**AUGUST 2020**


2020/10/14 21:10

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Dr. D. KANAKAVALLI, M. Com, M.Phil., Ph.D.,
ASSISTANT PROFESSOR AND CO-ORDINATOR, B.COM (CA)
DEPARTMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI – 625002

## CERTIFICATE

This is to certify that the project entitled **"A study on owner's preference towards online food ordering system in Madurai city with special reference to zomato"** submitted by **K.Vidhya (18PCO42)** in partial fulfillment of the requirement for the degree of **MASTER OF COMMERCE,** The American College, Madurai during 2019-2020, under my guidance and supervision and this project or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai

Date: 19.8.2020

Signature of the guide

**(Dr.D. KANAKAVALLI)**

(MR. J. JUSTIN MANOHAR)

Co-ordinator,

Department of Commerce (PG)

J.JUSTIN MANOHAR
Coordinator (PG)
Department of Commerce
THE AMERICAN COLLEGE
Madurai-625 002.

2020/10/14 21:10

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K.Vidhya B.Com

(18PCO42)

Department of Commerce,

The American College,

Madurai-625002

## DECLARATION

I hereby declare that the project titled **"A study on owner's preference towards online food ordering system in Madurai city with special reference to zomato"** submitted for the degree of **MASTER OF COMMERCE** is my original work and no part of project report has been submitted for the award of any other Degree, Diploma, Fellowship or other similar titles.

Place: Madurai

Date: 19.8.2020

Student's Signature

K.Vidhya.

Counter Signed By:

**Dr.D. KANAKAVALLI** (RESEARCH GUIDE)

2020/10/14 21:10

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## ACKNOWLEDGMENT

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**K. VIDHYA (18PCO42)**


2020/10/14 21:10

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# A STUDY ON CONSUMER PREFERENCE TOWARDS PATANJALI SOAP IN MADURAI CITY

**A project report submitted to the American college, Madurai in partial Fulfillment of the requirements for the degree of master of commerce**


**Researcher**

**M.VISHALI**

**(18PCO44)**

**Under the guidance of**

**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**






**SINCE 1881 DEPATRTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

**(An Autonomous institution Affiliated to Madurai Kamarajar University)**

**Re –accredited (2nd cycle) by NAAC with grade "A"**

**CGPA -3.46 on a 4 POINT SCALE**

**MADURAI – 625002**



**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**


**AUGUST - 2020**

**Dr. K. BAGAVATHI M.Com. M.Phil, MBA. PGDCA., Ph.D.,**

**ASSISTANT PROFESSOR- MANAGEMENT,**

**DEPARTMENT OF COMMERCE,**

**THE AMERICAN COLLEGE,**

**MADURAI-625002**

# CERTIFICATE

This is to certify that the project entitled **"A STUDY ON CONSUMER PREFERANCE TOWARDS PATANJALI SOAP IN MADURAI CITY"** submitted by **M.VISHALI (18PCO44)** in partial fulfillment of the requirement for the degree of **MASTER OF COMMERCE**, The American college, Madurai is done by him during period 2018-2020 under my guidance and this report or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai,

Date: 1.10.2020

Signature of the Guide

**COUNTERSIGED BY**

**(MR.J. JUSTIN MANOHAR)**

Coordinator M.Com,

Department of commerce

**M.VISHALI (18 PCO 44)**

**Department of commerce,**

**The American college,**

**Madurai – 625002**

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A STUDY ON CONSUMER PREFERANCE TOWARDS PATANJALI SOAP IN MADURAI CITY"** submitted for the degree of **MASTER OF COMMERCE** is my original work and no part of project report has been submitted for the award of any other Degree, Diploma, Fellowship or other similar titles.

Place: Madurai

Date: 1.10.2020

Vishali.M

Signature of the Researcher

**(M.VISHALI)**

Signature of The Guide :

# ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning the names of people who made it possible, whose constant guidance and encouragement crowns all efforts with our success.

First and foremost, I thank God for showering the blessing over myself throughout the year to finish my project successfully.

I would like to express my sincere thanks to my respected and beloved Principal **Dr. M. DAVAMANI CHRISTOBER M.sc., M.Phi1., M.Ed., PGDCA., Ph.D.,** I present my thanks to the management of our esteemed institution for providing me the opportunity to work on the topic.

I extend my deep gratitude to our Head of Department **Dr. A. MARTIN DAVID M.Com, M.Phil. PhD,** for providing me an opportunity to do this project at the post graduate level.

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Finally and more important I am deeply indebted to my parents, family members and friends for their constant encouragement and moral support throughout my research endeavor. There are many other who have helped me directly and indirectly to complete this research work. I thank them all wholeheartedly

**M.VISHALI**
**(18PCO44)**

# THE AMERICAN COLLEGE, MADURAI

## DEPARTMENT OF COMMERCE (PG)

## MENTOR - MENTEE REPORT

Name of the Mentor: _____

### PERSONAL DETAILS OF THE MENTEE

| | | | |
|---|---|---|---|
| **Roll No** | 18PCO45 | **Mother's Occupation** | Home maker |
| **Full Name** | S.ALAGU SUNDARI | **Institution - UG** | EMG Yadav Women's college, madurai-14 |
| **Email Address** | Salagu358@gmail.com | **First Generation Graduate (Yes/No)** | Yes |
| **Mobile Number** | 9944021532 | **Family Income (p.a)** | 60000 |
| **Father's Occupation** | Driver | **Part-time job(Yes/No)** | No |
| **Present Address** | 1/236,West Street,manalur, sivagangai district. | | |

# A STUDY ON THE CUSTOMER SATISFACTION TOWARDS MRKR INTERNET SERVICE PROVIDER WITH SPECIAL REFERENCE TO MADURAI CITY

A Project Report Submitted in partial fulfillment of the requirement for degree of

**Master of Commerce**


Researcher

**A.P.GOWRI PRIYA**

**18PCO52**

Under the guidance of

**Dr D. KANAKAVALLI, M.COM., M. Phil., PhD., DCA**


Since 1881


**DEPARTMENT OF COMMERCE**

**THE AMERICAN COLLEGE,MADUARI – 625 002.**

(An Autonomous institution Affiliated to Madurai Kamaraj University)
Re-accredited (2nd Cycle) by NAAC with Grade "A"
CGPA – 3.46 on a 4-point scale


**AUGUST-2020**


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**Dr D. KANAKAVALLI, M.COM, M. Phil., PhD., DCA**
**ASSISTANT PROFESSOR AND CO-ORDINATOR, B.COM (CA)**
**DEPARTMENT OF COMMERCE,**
**THE AMERICAN COLLEGE,**
**MADURAi-625002**

## CERTIFICATE

This is to certify that the project entitle "**A Study on The Customer satisfaction towards MRKR internet service provider with special reference to Madurai City**" submitted by ***A.P.GOWRI PRIYA*** (18PCO52) in partial fulfillment of the requirement for the degree of **Master of Commerce in** The American College, Madurai is done by him during the period of 2018-2020, under my guidance and this report or any part thereof has not been submitted elsewhere for the award of any other similar titles.

Signature of the research guide

***(Dr D. KANAKAVALLI, M.com, M. Phil., PhD., DCA)***

PLACE: MADURAI

DATE:

COUNTERSIGED BY

(MR. J.JUSTIN MANOHAR)

Co- ordinator,

Department of commerce(PG)

J.JUSTIN MANOHAR
Coordinator (PG)
Department of Commerce
THE AMERICAN COLLEGE
Madurai-625 002.

2020/10/17 12:56

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A.P.GOWRI PRIYA
18PCO52 - M. Com.,
DEPARTMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI - 625002

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A study on the customer satisfaction towards MRKR internet service provider with special reference to Madurai City"** submitted for the degree of Master of Commerce is my original work and no part of the project has been submitted for the award of any degree, diploma, fellowship or other similar titles.

**PLACE: MADURAI**

**DATE:** 5/8/2020

A.P. Gowri Priya

Signature of the Researcher

**(A.P.GOWRI PRIYA)**

Counter signed by:

D. Kanakavalli

**(Dr D. KANAKAVALLI ( RESEARCH GUIDE)**

:

2020/10/17 12:56

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## ACKNOWLEDGMENT

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I extend my deep gratitude to our Head of the Department **Dr. A. MARTIN DAVID M.Com, M.Phil, PhD,** for providing me an opportunity to do this project at the post graduate level.

I extend my deep gratitude to our Coordinator of department PG department of commerce **MR. J. JUSTIN MANOHAR M.Com, M.Phil**, for encouraging us and giving us the freedom to use our own ideas in doing the project. I sincerely thank him for being instrumental in helping us in using the SPSS software.

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There are many other who have helped me directly and indirectly to complete this research work. I thank them all whole- heartedly.

A.P. GOWRI PRIYA (18PCO52)


2020/10/17 12:56

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# A study on customer satisfaction towards OLA cabs in Madurai city

A project report submitted to the American college,Madurai in partial fulfiilment of the requirements for the degree of master of commerce


Researcher

V.P DANIEL JEBASEELAN

(18PCO09)

Under the guidance of

Dr.R.MANIKANDAN, M.Com, MBA, M.Phil., PhD..,


Since 1881

**DEPATRTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

(An autonomous institution Affiliated to Madurai Kamarajar University)

Re –accredited (2nd cycle) by NAAC with grade "A"CGPA -3.46 on a 4 point scale

Madurai – 625002

**AUGUST-2020**

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**Dr.R.MANIKANDAN, M.Com, MBA, M.Phil., PhD..,**
**ASSISTANT PROFESSOR- MANAGEMENT,**
**DEPARTMENT OF COMMERCE,**
**THE AMERICAN COLLEGE,**
**MADURAI-625002**

## CERTIFICATE

This is to certify that the project entitled **"A study on customer satisfaction towards OLA cabs in Madurai city"** submitted by **V.P DANIEL JEBASEELAN (18 PCO 09)** in partial fulfillment of the requirement for the degree of **MASTER OF COMMERCE**, The American college, Madurai during this period 2018-2020, under my guidance and this project or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

R. M

Place: Madurai,
Date: 05-10-2020

Signature of the Guide

COUNTERSIGED BY

(Prof.J. JUSTIN MANOHAR)
Coordinator M.Com,
Department of commerce

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**V.P DANIEL JEBASEELAN (18 PCO 09)**

**Department of Commerce,**

**The American college,**

**Madurai – 625002**

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A study on customer satisfaction towards OLA cabs in Madurai city"** submitted for the degree of **MASTER OF COMMERCE** is my original work and no part of project report has been submitted for the award of any other Degree, Diploma, Fellowship or similar titles.

Place: Madurai,

Date:05-10-2020

V P Daniel Jebaseelan

Signature of the Researcher

(V.PDANIELJEBASEELAN)

R. M

Signature of the Guide

Scanned with CamScanner

# ACKNOWLEDGEMENT

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I would like to express my sincere thanks to my respected and beloved Principal **Dr. M. DAVAMANI CHRISTOBER M.Sc., M.Phil., M.Ed., PGDCA., Ph.D.,** I present my thanks to the management of our esteemed institution for providing me the opportunity to work on the topic.

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I would like to express my profound thanks to **Dr.R.MANIKANDAN, M.Com, MBA, M.Phil., PhD..,** for his meticulous supervision, constant inspiration and invaluable guidance throughout the course of the project.

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**V.P DANIEL JEBASEELAN (18PCO09)**

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# A STUDY ON EFFECTIVENESS OF RECRUITMENT AND SELECTION PROCESS WITH SPECIAL REFERENCE TO RELIANCE RETAIL LIMITED, MADURAI

A project report submitted to The American College, Madurai in partial fulfillment of the requirement for the degree of Master of commerce


Submitted by

**S. MOHAMMED RIYAZ**

**(18PCO23)**

Under the guidance of

**Dr.T. GNANA GOWSALYA, M.Com., MBA., M.Phil., Ph.D.,**






**DEPARTMENT OF COMMERCE**

**THE AMERCIAN COLLEGE**

**(An Autonomous Institution Affiliated to Madurai Kamajar University)**

**Re-accredited with (2nd cycle) by NAAC with Grade "A" CGPA-3.46 ON A 4POINT SCALE**

**MADURAI 625002**

**DR .T. GNANA GOWSALYA, M.Com., MBA. ,M.PHIL., Ph.D.,**
ASSISTANT PROFESSOR - B.Com (CA)
DEPARMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI-625002

# CERTIFICATE

This is to certify that the project entitled "**A STUDY ON EFFECTIVENESS OF RECRUITMENT AND SELECTION PROCESS WITH SPECIAL REFERENCE TO RELIANCE RETAIL LIMITED, Madurai"** submitted by **S.MOHAMMED RIYAZ (18 PCO 23)** in partial fulfillment of the requirement for the degree of **MASTER OF COMMERCE**, The American College, Madurai during 2019- 2020, under my guidance and supervision and this project or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai,

Signature of the guide

Date: 15.10.20

**(Dr. T. GNANGOWSALYA)**

**(Mr. J. JUSTIN MANOHAR)Co- coordinator M.Com,**
**Department of Commerce**

**S. MOHAMMED RIYAZ (18 PCO 23)**
Department of Commerce,
The American College,
Madurai-625002

## DECLARATION

I here declare that the project titled **"A STUDY ON EFFECTIVENESS OF RECRUITMENT AND SELECTION PROCESS WITH SPECIAL REFERENCE TO RELIANCE RETAIL LIMITED, Madurai"** submitted for the degree of **MASTER OF COMMERECE** is my original work and no part project report has been submitted for the award for any Degree, Diploma, fellowship or other similar titles.

Place: Madurai

Date: 15.10.20

Student's Signature

Counter Signed By: (GUIDE)

**Dr. T. GNANA GOWSALYA**

## ACKNOWLEDGMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning the names of people who made it possible, whose constant guidance and encouragement crowns all efforts with our success.

First foremost I thank God for showering the blessing over myself throughout the year to finish my project successfully

I would like to express my profound thanks to my guide **Dr. T. GNANA GOWSALYA, M.Com., MBA., M.PHIL., Ph.D.,** for her meticulous supervision, constant inspiration and guidance the course of the project.

I extend my deep gratitude to our Head of the Department **Dr. A. MARTIN DAVID M.COM, M.Phil, Ph.D** for providing me an opportunity to do this project at the post graduate level.

I extend my deep gratitude to our coordinator of department PG commerce **MR. J.JUSTIN MANOHAR M.COM., M.PHIL.,** for encouraging us and giving us the freedom to use our own ideas in doing the project. I sincerely thank him for being instrumental in helping us in using the SPSS software.

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There are many other who have helped me directly and indirectly to complete this research work. I thank them all whole- heartedly.

**S.MOHAMMED RIYAZ**

**(18PCO23)**

# A STUDY ON ONLINE SHOPPING PREFRENCES OF WOMEN TOWARDS MADUAI CITY

A project report submitted to The American College, Maduai in partial fulfillment of the requirement for the degree of Master of commerce


Submitted by

**D. JAYA PRIYA**

**(18PCO17)**

Under the Guidance of

**Dr. T. GNANA GOWSALYA, M.Com., M.Phil., Ph.D.,**






**DEPARTMENT OF COMMERCE**

**THE AMERCIAN COLLEGE**

**(An Autonomous Institution Affiliated to Madurai Kamajar University)**

**Re-accredited with (2nd cycle) by NAAC with Grade "A" CGPA-3.46 ON A 4POINT SCALE**

**MADURAI 625002**

Dr .T. GNANA GOWSALYA, M.Com., MBA., M.Phil., Ph.D.,
DEPARMENT OF COMMERCE,
THE AMERICN COLLEGE,
MADURAI-625002

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON ONLINE SHOPPING PREFRENCES OF WOMEN TOWARDS IN MADURAI CITY" submitted by D. JAYA PRIYA (18 PCO 17) in partial fulfillment of the requirement for the degree of MASTER OF COMMERECE, The American College, Madurai during 2019-2020, under my guidance and supervision and this project or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai,

Date: 15.10.20

Signature of the guide

(Dr. T. GNANGOWSALYA)

(Mr. J. JUSTIN MANOHAR)Co- coordinator M.Com,

Department of Commerce

D. JAYA PRIYA
(18 PCO 17)
Department of Commerce,
The American College,
Madurai-625002

# DECLARATION

I here declare that the project titled "**A STUDY ON ONLINE SHOPPING PREFRENCES OF WOMEN TOWARDS IN MADURAI CITY**" submitted of the degree of **MASTER OF COMMERECE** is my original work and no part project report has been submitted for the award for any Degree, Diploma, fellowship or other similar titles.

**Place: Madurai**

**Date:**

**Student's Signature**

**Counter Signed By: (GUIDE)**

**Dr. T. GNANA GOWSALYA**

# ACKNOWLEDGMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning the names of people who made it possible, whose constant guidance and encouragement crowns all efforts with our success.

First foremost I thank God for showering the blessing over myself throughout the year to finish my project successfully

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There are many other who have helped me directly and indirectly to complete this research work. I thank them all whole-heartedly.

**D.JAYAPRIYA (18PCO17)**

# A STUDY ON CUSTOMER BUYING BEHAVIOUR IN SATHYA HOME APPLIANCES IN MADURAI CITY.

A Project Report submitted to the American college, Madurai in partial fulfilment of the Requirements for the Degree of Master of Commerce Researcher


Submitted by

**A.KARTHIK**

**18PCO20**

Under the guidance of

**Dr.T. GNANA GOWSALYA, M.Com.,MBA., M.Phil.,Ph.D.,**


Since 1881

**DEPATRTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

(An autonomous institution Affiliated to Madurai Kamarajar University)
Re –accredited (2nd cycle) by NAAC with grade "A"CGPA -3.46 on a 4point scale
Madurai – 625002

**April 2020**

**DR .T. GNANA GOWSALYA, M.Com., MBA. ,M.PHIL., Ph.D.,**

**CO-ORDINATOR- B.COM (CA)**

**DEPARMENT OF COMMERCE,**

**THE AMERICAN COLLEGE,**

**MADURAI-625002**

## CERTIFICATE

This is to certify that the project entitled "**A STUDY ON CUSTOMER BUYING BEHAVIOUR IN MADURAI CITY"** submitted by **A.KARTHIK (18 PCO 20)** in partial fulfilment of the requirement for the degree of **MASTER OF COMMERECE,** The American college, Madurai during 2019-2020, under my guidance and supervision and this project or any partthereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai,

Date: 15.10.20

Signature of the guide

T. Gn Gow

(DR. T. GNANA GOWSALYA)

(MR. J. JUSTIN MANOHAR)

Co- ordinator M.COM,

Department of commerce.

**A.KARTHIK**

**(18 PCO 20)**

**Department of commerce,**

**The American college,**

**Madurai-625002**

## DECLARATION

I here declare that the project titled "**A STUDY ON CUSTOMER BUYING BEHAVIOUR IN MADURAI CITY**" Submitted of the degree of **MASTER OF COMMERECE** is my original work and no part project report has been submitted for the award for any Degree, Diploma, fellowship or other similar titles.

Place: Madurai

Date: 15.10.20

A. Karthik

Student's Signature

Counter Signed By: (GUIDE)

T. Gnana Gowsalya

DR. T. GNANA GOWSALYA

## ACKNOWLEDGMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without mentioning the names of people who made it possible, whose constant guidance and encouragement crowns all efforts with our success.

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**A.KARTHIK**

**18PCO20**

# A STUDY ON CUSTOMER PREFERENCE TOWARDS EVENING RESTAURANTS IN MADURAI CITY

A project report submitted to the American college, Madurai in partial fulfillment of the requirements for the degree of master of commerce


Researcher

A.ISRAVEL

(18PCO16)

Under the guidance of

Dr.R.MANIKANDAN, M.Com, MBA, M.Phil., PhD..,


Since 1881

**DEPATRTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

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Madurai – 625002

**AUGUST-2020**

**Dr.R.MANIKANDAN, M.Com, MBA, M.Phil., PhD..,**
**ASSISTANT PROFESSOR- MANAGEMENT,**
**DEPARTMENT OF COMMERCE,**
**THE AMERICAN COLLEGE,**
**MADURAI-625002**

## CERTIFICATE

This is to certify that the project entitled **"A STUDY ON CUSTOMER PREFERENCE TOWARDS THE EVENING RESTAURANTST IN MADURAI CITY"** submitted by **A.ISRAVEL (18 PCO 16)** in partial fulfillment of the requirement for the degree of **MASTER OF COMMERCE**, The American college, Madurai during this period 2018-2020, under my guidance and this project or any part thereof has not been submitted elsewhere for any Degree or Diploma, Fellowship or other similar titles.

Place: Madurai,

Signature of the Guide

Date:

COUNTERSIGED BY

(Prof.J. JUSTIN MANOHAR)

Coordinator M.Com,

Department of commerce

**A.ISRAVEL(18 PCO 16)**

**Department of commerce,**

**The American college,**

**Madurai – 625002**

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A STUDY ON CUSTOMER PREFERENCE TOWARDS EVENING RESTAURANTS IN MADURAI CITY"** submitted for the degree of **MASTER OF COMMERCE** is my original work and no part of project report has been submitted for the award of any other Degree, Diploma, Fellowship or similar titles.

A. ISRAVEL

Signature of the researcher

(A.ISRAVEL)

R. M

Signature of the guide

# ACKNOWLEDGEMENT

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**A.ISRAVEL**
**(18PCO16)**

# A STUDY ON THE CONSUMER BEHAVIOUR ON DURABLE GOODS IN MADURAI CITY

A Project Report Submitted in partial fulfilment of the requirement for degree of
**Master of Commerce**


Researcher

**S.PUNITHALAKSHMI**

**18PCO30**

Under the guidance of

**Dr. R. MANIKANDAN, M.COM, MBA, M.phil, ph.D.,**


Since 1881


**DEPARTMENT OF COMMERCE**

**THE AMERICAN COLLEGE, MADUARI – 625 002.**
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CGPA – 3.46 on a 4-point scale


**AUGUST-2020**

**Dr. R. MANIKANDAN, M.COM, MBA, M.Phil., Ph.D.,**

**Assistant Professor, department of commerce,**
**THE AMERICAN COLLEGE,**
**MADURAI-625002**

CERTIFICATE

This is to certify the project entitle "**A STUDY ON CONSUMER BEHAVIOUR ON DURABLE GOODA IN MADURAI CITY**" submitted by **S.PUNITHALAKSHMI (18PCO30)** in partial fulfilment of the requirement for the degree of **MASTER OF COMMERCE** in American college, Madurai is done by him during the period of 2018 – 2020, under my guidance and this report or any thereof has not been submitted elsewhere for the award of ant other degree.

Signature of the guide

PLACE: MADURAI

DATE:

COUNTERSIGED BY

**(Mr. J. JUSTIN MANOHAR)**
Coordinator M.Com,
Department of commerce

**S. PUNTHALAKSHMI**

18PCO30 - M. Com.,
DEPARTMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI - 625002

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A study on the Consumer behaviour on durable goods in Madurai city"** submitted for the degree of Master of Commerce is my original work and no part of the project has been submitted for the award of any degree, diploma, fellowship or other similar titles.

Signature of the Researcher

**(S. PUNITHALAKSHMI)**

**Signature of the Guide**

**(Dr. R. MANIKANDAN, M.COM, MBA, M.Phil., Ph.D.,)**

**PLACE: MADURAI**

**DATE:**

# A STUDY ON CUSTOMER SATISFACTION TOWARDS ROYAL ENFIELD WITH SPECIAL REFERENCE TO MADURAI CITY.

A project report submitted to the American college,Madurai in partial fulfillment of the requirements for the degree of master of commerce


Researcher

R.SARANYA

(18PCO36)

Under the guidance of

Dr.R.MANIKANDAN, M.com, MBA, M.Phil., PhD..,


Since 1881

**DEPATRTMENT OF COMMERCE**

**THE AMERICAN COLLEGE**

(An autonomous institution Affiliated to Madurai Kamarajar University)

Re –accredited (2nd cycle) by NAAC with grade "A"CGPA -3.46 on a 4 point scale

Madurai – 625002

**AUGUST-2020**

**Dr. R. MANIKANDAN, M.COM, MBA, M.Phil., Ph.D.,**

**Assistant Professor, department of commerce,**
**THE AMERICAN COLLEGE,**
**MADURAI-625002**

## CERTIFICATE

This is to certify the project entitle **"A STUDY ON CUSTOMER SATISFACTION TOWARDS ROYAL ENFIELD WITH SAPECIAL REFERENCE TO MADURAI CITY" submitted by R.SARANYA (18 PCO 36)** in partial fulfilment of the requirement for the degree of **MASTER OF COMMERCE** in American college, Madurai is done by him during the period of 2018 – 2020, under my guidance and this report or any thereof has not been submitted elsewhere for the award of ant other degree.

Signature of the guide

PLACE: MADURAI

DATE:

COUNTERSIGED BY

**(Mr. J. JUSTIN MANOHAR)**
Coordinator M.Com,
Department of commerce

**R.SARANYA (18 PCO 36)**

DEPARTMENT OF COMMERCE,
THE AMERICAN COLLEGE,
MADURAI - 625002

## DECLARATION BY THE RESEARCHER

I hereby declare that the project titled **"A STUDY ON CUSTOMER SATISFACTION TOWARDS ROYAL ENFIELD WITH SAPECIAL REFERENCE TO MADURAI CITY"** submitted for the degree of Master of Commerce is my original work and no part of the project has been submitted for the award of any degree, diploma, fellowship or other similar titles.

R. Saranya.
Signature of the Researcher

**(R.SARANYA)**

R. M

**Signature of the Guide**

**(Dr. R. MANIKANDAN, M.COM, MBA, M.Phil., Ph.D.,)**

**PLACE: MADURAI**

**DATE:**

HAP

Hatsun Agro Product Ltd.
Registered Office :
Domaine,Door No : 1/20A,
Rajiv Gandhi Salai (OMR),
Karapakkam,
Chennai - 600 097. India.
T : 044-24501622,
F : 044-24501422
E : info@hap.in | www.hap.in
CIN : L15499TN1986PLC012747

31.05.2019

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms.T.Harini** of **The American College** has completed **Internship Training** at our **Madurai Dairy** in **Production department** from **01.05.2019 to 31.05.2019.** She has done an exhaustive study and successfully completed her training.

During the Training period, we found her sincere, dedicated and her conduct was good.

With Best Wishes

For Hatsun Agro Product Ltd

ANILKUMAR M
ASSISTANT MANAGER-HR

HAP

Hatsun Agro Product Ltd.
Registered Office :
Domaine,Door No : 1/20A,
Rajiv Gandhi Salai (OMR),
Karapakkam,
Chennai - 600 097. India.
T : 044-24501622
F : 044-24501422
E : info@hap.in | www.hap.
CIN : L15499TN1986PLC012

31.05.2019

**TO WHOMSOEVER IT MAY CONCERN**

*This is to certify that* **Ms.S.Kamalaveni** of **The American College** has completed **Internship Training** at our **Madurai Dairy** in **Production department** from **01.05.2019 to 31.05.2019.** She has done an exhaustive study and successfully completed her training.

During the Training period, we found her sincere, dedicated and her conduct was good.

With Best Wishes

For Hatsun Agro Product Ltd

ANILKUMAR M
ASSISTANT MANAGER-HR

GSTIN : 33AFNPA7431D1ZW

# Lakshmi Feed Mill

**Office :** 19A, Poonthamalli Street, K.K.Road, Villupuram - 605 602. Tamilnadu, India. Tel : +91 04146 221130,
**Factory :** R.S.No.40/1, Koothampoondi Road, Vikaravandi, Villupuram T.K.,Tamilnadu, India.
email : lakshmi_feedmill@yahoo.co.in

Date: 15.06.19

## TO WHOM IT MAY CONCERN

This is to certify that **Mr.S.Mohammed Akram** (Roll No: 18PFS07 doing M.Sc. Food Science) at **The American College** (Autonomous),Madurai have done In-plant training in our Industry from 06.06.19 to 15.06.19. During this period of training we found him to be punctual, hardworking and Inquisitive.

We wish him success in his future endeavors.

For Lakshmi Feed Mill,

LAKSHMI FEED MILL VIKRAVANDI 605 652.

Authorized Signatory

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **M.Ponsangeetha (18PFS13)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

FEBIN
marine foods

*Date: 20.06.2019*

***TO WHOMSOEVER IT MAY CONCERN***

*This is to certify that* ***Ms. Shahana Asharaf M.P , Final*** *year* ***Msc Food Science*** *student of* ***The American College, Madurai*** *,has done her in plant training in our organization during the period from 1st June 2019 to 20th June 2019 as part of their curriculum.*

*She had been given all the required data and guidance for the successful completion of the training and completed her assignment in the limited span available for completion.*

*Her attendance during the period of training was regular and to the best of our knowledge and her conduct and character was found good.*

*We wish to all success in her future assignments.*

**For FEBIN MARINE FOODS**

**SEEMA SANAL**

**TECHNICAL MANAGER**

FEBIN MARINE FOODS ★ Eramalloor ★ ALLEPPEY 688 537

Eramalloor, Alappuzha - 688 537, Kerala, India., Phone : +91-478-2879966, 2879778, Fax : 91 478-2879962,
E-mail : lab@febinmarine.com, Website : www.febinmarine.com

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **R.Yamuna (18PFS24)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

To

Vice principal

American college

Madurai-625002.

Dear Sir,

We would like to inform you that "**Mr.Anest raj Reg no:18pfs25**" M.sc Food Science has undergo internship program in our organization during period from 24.12.18 to 02.01.19

For INDIAN FOODS PRIVATE LIMITED

2.1.19.

Authorised Signatories

Date: 02.01.2019.

Place: Thattankulam

INDIANFOODS
Simple & Soulful

INDIANFOODS PVT LTD.
Factory & Admin Office : Survey Number : 169/27A, Thattankulam Village,
Rameshwaram Highway, Tiruppuvanam - 630611
Tel : (4574)-265234 E-Mail : ifpl.mdu@gmail.com

Scanned with CamScanner

# Internship Certificate

This is to certify that **Ms. Deveki. T.** has worked as Summer intern from June 3rd 2019 to July 3rd 2019 under the guidance of Mr. K. Vatchravelu, Sr. Technical Officer (3), Central Instruments Facility & Services (CIFS) Department, CSIR-CFTRI in the area of Analytical Instrumentation.

The performance evaluation for the above person for the period of internship is as follows.

| | | | | | |
|---|---|---|---|---|---|
| 1. | Attendance | Satisfactory | | Not satisfactory | |
| | | ✓ | | | |
| 2. | Overall Performance | Excellent | Very Good | Good | Average |
| | | ✓ | | | |
| 3. | Remarks (if any) | Very attentive and enthusiastic learner towards new concepts and modern techniques used in analytical Instruments | | | |

3/7/2019

**Signature with Date**

**Name: Mr. P. Manilal**
Designation: Sr. Prinicipal Scientsit
&Head, PMC

पी. मणिलाल / P. MANILAL
प्रधान / HEAD
योजना मॉनीटरिंग एवं समन्वयन
Planning, Monitoring & Co-ordination
केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान
Central Food Technological Research Institute
मैसूर / Mysore – 570 020

03/07/2019

**Guide's Signature**
(K. VATCHARAVELU)

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **N.Dinesh Pandi (18PFS28)**, a student of **M.Sc Food Science, THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

# TAMILNADU FOODGRAINS MARKETING YARD

SPV of Grains Cluster
Industrial Infrastructure Upgradation Scheme, DIPP
Ministry of Commerce Government of India
Sikkandarchavadi, Madurai-625018

## INTERNSHIP TRAINING CERTIFICATE

This is to certify that **S.Arun Kumar (18PFS29)**, a student of **M.Sc Food Science**, **THE AMERICAN COLLEGE**, Madurai has successfully completed **Industrial Internship Training and also experimented value added product development** from 13th May to 1st June 2019 at **Tamilnadu Foodgrains Marketing Yard,** Sikkandharchavadi, Madurai.

**S.RETHINAVELU**
Chairman & Managing Director

**DR. K .SINGARAVADIVEL**
Independent Director &
Former Director of IIF.PT
Ministry of Food Processing – GOI

**K.SURESH KUMAR**
Executive Director

# JaishreeMisra's *Secrets and Lies*: A Postcolonial Feminist Reading

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

by

**S Anisha Biala**
**(18PGE04)**

Under the guidance & supervision of
**Ms. S Jemima Rubavathy**, MA.,
Assistant Professor
Research Department of English
The American College
Madurai

1881

**RESEARCH DEPARTMENT OF ENGLISH**
**THE AMERICAN COLLEGE**
(AN AUTONOMOUS INSTITUTION AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)
(Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA – 3.46 on a 4 – point scale)
MADURAI, TN, INDIA

**APRIL 2020**

## CERTIFICATE

This is to certify that the project work titled *Jaishree Misra's Secrets and Lies: A postcolonial feminist reading* is a record of research work carried out by **Ms. S Anisha Biala (18PGE04)** in the Research Department of English, The American College, Madurai, under my guidance and supervision.


**Dr. J. JOHN SEKAR**
Head & Associate Professor
Research Department of English
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M.A., M.Phil., PGDTE(CIEFL), PGDHE(IGNOU), PGDCE(UH), Ph.D.,
Head & Associate Professor
Research Department of English
Dean, Academic Policies & Administration
The American College, Madurai-625 002

# Stuart Hall's Cultural Studies and Theoritical Legacies in Tamil: a Translation.

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
**Master of Arts** in **English**

by

**T. AMALA SURYA**
**(18PGE02)**

Under the guidance & supervision of
**Dr.J. RAJAKUMAR, M.A., M.Phil.,Ph.D.,B.Ed**
Associate Professor
Research Department of English
The American College
Madurai




**RESEARCH DEPARTMENT OF ENGLISH**
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(Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA – 3.46 on a 4 – point scale)
MADURAI, TN, INDIA

**MAY/JUNE 2020**

# CERTIFICATE

This is to certify that the project work titled **Stuart Hall's *Cultural studies and theoretical legacies* in Tamil: A Translation** is a record of research work carried out by **Ms. T. AMALA SURYA (18PGE02)** in the Research Department of English, The American College, Madurai, under my guidance and supervision.

**Dr. J. JOHN SEKAR**
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Dr. J. JOHN SEKAR M.A.,M.Phil.,B.Ed.,PGDTE(IGNOU),PGDCE(UH),Ph.D.,
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The American College, Madurai-625 002

**Dr.J.RAJAKUMAR**
Associate Professor
Research Department of English
The American College
Madurai – 625 002

# Enhancement of English Language Proficiency through Bilingual Bible

Dissertation submitted to the Research Department of English, The American College
in partial fulfilment of the requirements for the award of the Degree of
**Master of Arts** in **English**

by

**D.R. JOHN OBADIAH**
**(18PGE42)**

Under the guidance & supervision of
**Mr. V.P. SAGIMAYNONATHAN,** M.A.(Eng)., M.A.(JMC)., M.Phil.,
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**RESEARCH DEPARTMENT OF ENGLISH**
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MADURAI

APRIL 2020

# CERTIFICATE

This is to certify that the dissertation work titled **Enhancement of English Language Proficiency through Bilingual Bible** is a record of research project work done by **Mr. D.R. John Obadiah (18 PGE 42)** under my guidance and supervision at the Research Department of English, The American College, Madurai. The project report has not previously formed the basis for any other research project or academic article and the report as a whole in its approach to the subject, in its organization and the treatment of the materials, and in its critical evaluation represents independent work on the part of the candidate.

Dr. J. JOHN SEKAR
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Dr. J. JOHN SEKAR
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Head & Associate Professor
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The American College, Madurai-625 002

MR. V.P. SAGIMAYNONATHAN
Guide & Supervisor

# Child Sexual Abuse in Pinkie Virani's *Bitter Chocolate: Child Sexual Abuse in India*: A Psychoanalytical Study

Project submitted to the Research Department of English, The American College in partial fulfillment of the requirements for the award of the Degree of

**Master of Arts** in **English**

by

**FLENTA A RINI**

**(18PGE 11)**

Under the guidance & supervision of

**Dr. T. ANITA CAROLINE, M.A., M.Phil., Ph.D.,**

Assistant Professor

Research Department of English

The American College

Madurai

1881

**RESEARCH DEPARTMENT OF ENGLISH**

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(Re-accredited (2nd Cycle) by NAAC with "A" CGPA – 3.46 on a 4 – point scale)
MADURAI, TN, INDIA

**MAY/ JUNE 2020**

## CERTIFICATE

This is to certify the project work titled *Child Sexual Abuse in Pinkie Virani's Bitter Chocolate: Child Sexual Abuse in India: A Psychoanalytic Study* is a record of research work carried out by **Ms. FLENTA A RINI (18PGE 11)** in the Research Department of English, The American College, Madurai, under my guidance and supervision.


**Dr. J. JOHN SEKAR**
Head & Associate Professor
Research Department of English
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Madurai 625 002, TN
INDIA

**Dr. T. ANITA CAROLINE, M.A., M.Phil., Ph.D.,**
Associate Professor
Research Department of English
The American College
Madurai – 625 002

# *THE MEENAKSHI AMMAN TEMPLE AS A CULTURAL IDENTITY OF MADURAI - A STUDY*

Dissertation submitted to the Research Department of English, The American College in partial fulfillment of the requirements for the award of the Degree of **Master of Arts in English**

by

**M M KEERTHI VERMA**

**(18PSE13)**

Under the guidance & supervision of

**Dr. Daniel Rubaraj M.A., M.Phil., Ph.D.,**

AssistantProfessor

Research Department of English

The American College

Madurai.

1881

**RESEARCH DEPARTMENT OF ENGLISH**
**THE AMERICAN COLLEGE**
(ANAUTONOMOUS INSTITUTION AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)
MADURAI.

**April 2020**

# CERTIFICATE

This is to certify that the dissertation work titled ***THE MEENAKSHI AMMAN TEMPLE AS A CULTURAL IDENTITY OF MADURAI- A STUDY*** is a record of research project work done by **Ms. Keerthi Verma 18PSE13** under my guidance and supervision at the Research Department of English, The American College, Madurai. The project report has not previously formed the basis for any other research project or academic article and the repot as a whole in its approach to the subject, in its organization and the treatment of the materials, and in its critical evaluation represents independent work on the part of the candidate.

Dr. STANLEY MUTHANDI STEPHEN

Head(SF)

Dr. S. JOHN SEKAR
M.A.,M.Phil.,PGDTE(CIEFL), PGDHE(IGNOU), PGDCE(UH), Ph.D.,
Head & Asscciate Professor
Research Department of English
Dean, Academic Policies & Administration
The American College, Madurai-625 002

**Dr. Daniel Ruparaj**

Guide and Supervisor

## Declaration by the Candidate

# INDIVIDUAL PSYCHOLOGY IN RACHAEL LIPPINCOTT'S FIVE FEET APART .

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

by

**P.ASHWHINA**
**(18 PSE 05)**

Under the guidance & supervision of
**Ms. G. Charanya, M.A., Mphil., SET.**

Assistant Professor

Research Department of English

The American College

Madurai




**RESEARCH DEPARTMENT OF ENGLISH**
**THE AMERICAN COLLEGE**
(AN AUTONOMOUS INSTITUTION AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)
MADURAI
APRIL 2020

## CERTIFICATE

This is to certify that the dissertation work titled **INDIVIDUAL PSYCHOLOGY IN RACHAEL LIPPINCOTT'S FIVE FEET APART** is a record of research project work done by **Ms. P. Ashwhina(18 PSE 05)** under my guidance and supervision at the Research Department of English, The American College, Madurai. The project report has not previously formed the basis for any other research project or academic article and the report as a whole in its approach to the subject, in its organization and the treatment of the materials, and in its critical evaluation represents independent work on the part of the candidate.

**Dr. S. STANLEY MOHANDOSS STEPHEN**
Head (SF)

**Ms. G. Charanya**
Guide & Supervisor

Dr. J. JOHN SEKAR
M.A.,M.Phil.,PGDTE(CIEFL), PGDHE(IGNOU), PGDCE(UH), Ph.D.
Head & Associate Professor
Research Department of English
Dean, Academic Policies & Administration
The American College, Madurai-625 002

# Cross-Cultural Invasion in Madurai – A Study

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

by

**S.B. SATHYA**
**(18 PSE 35)**

Under the guidance & supervision of
**Mr. R Daniel Rubaraj,** M.A, M.Phil.,
Assistant Professor
Research Department of English
The American College
Madurai

1881

**RESEARCH DEPARTMENT OF ENGLISH**
**THE AMERICAN COLLEGE**
(AN AUTONOMOUS INSTITUTION AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)
MADURAI

APRIL 2020

## CERTIFICATE

This is to certify that the dissertation work titled **Cross-Cultural Invasions in Madurai - A Study** is a record of research project work done by **Ms. S.B. Sathya (18 PSE 35)** under my guidance and supervision at the Research Department of English, The American College, Madurai. The project report has not previously formed the basis for any other research project or academic article and the report as a whole in its approach to the subject, in its organization and the treatment of the materials, and in its critical evaluation represents independent work on the part of the candidate.

04/12/20

**Dr. S. STANLEY MOHANDOSS STEPHEN**
Head (SF)

**Mr. R. Daniel Rubaraj**
Guide & Supervisor

Dr. J. JOHN SEKAR
M.A.,M.Phil.,PGDTE(CIEFL), PGDHE(IGNOU), PGDCE(UH), Ph.D.,
Head & Associate Professor
Research Department of English
Dean, Academic Policies & Administration
The American College, Madurai-625 002

# Convultion of Personality in Ottessa Moshfegh's *Eileen*: A Psychoanalytic Study

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

by

**S. AHAMED ASWAR**

**(18 PSE 01)**

Under the guidance & supervision of

**Mr. M. JOSIAH IMMANUEL M.A, MPhil**

Assistant Professor

Research Department of English

The American College

Madurai

**1881**

**RESEARCH DEPARTMENT OF ENGLISH**

**THE AMERICAN COLLEGE**

(AN AUTONOMOUS INSTITUTION AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)

MADURAI

APRIL 2020

# CERTIFICATE

This is to certify that the dissertation work titled **Convultion of Personality in Ottessa Moshfegh's *Eileen*: A Psychoanalytic Study** is a record of research project work done by **Mr. S. AHAMED ASWAR (18 PSE01)** under my guidance and supervision at the Research Department of English, The American College, Madurai. The project report has not previously formed the basis for any other research project or academic article and the report as a whole in its approach to the subject, in its organization and the treatment of the materials, and in its critical evaluation represents independent work on the part of the candidate.

**Mr. M. JOSIAH IMMANUEL**

Guide & Supervisor

**Dr. S. STANLEY MOHANDOSS STEPHEN**

Head (SF)

Dr. J. JOHN SEKAR
M.A.,M.Phil.,PGDTE(CIEFL), PGDHE(IGNOU), PGDCE(UH), Ph.D.,
Head & Associate Professor
Research Department of English
Dean, Academic Policies & Administration
The American College, Madurai-625 002

# Rationalising the twisted minds: Behavioral Analysis of the Psychopath in *Rattle*

Project submitted to Postgraduate Department of English (SF), The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

by

**M. Ramkumar**
**(18 PSE 40)**

Under the guidance & supervision of
**Ms. S. Saradha Devi, M.A**
Assistant Professor
Postgraduate Department of English (SF)
The American College
Madurai

1881

**POSTGRADUATE DEPARTMENT OF ENGLISH (SF)**
**THE AMERICAN COLLEGE**
(AN AUTONOMOUS INSTITUTION AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)
(Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA – 3.46 on a 4 – point scale)
MADURAI

April 2020

## CERTIFICATE

This is to certify that the project work titled **Rationalising the twisted minds: Behavioral Analysis of the Psychopath in *Rattle*** is a record of project work done by **Mr. M. Ramkumar** at the Postgraduate Department of English (SF), The American College, Madurai, under my guidance and supervision. The project has not previously formed the basis for the award of any Degree, Diploma, Associateship, Fellowship or other similar titles and that the project as a whole in its approach to the subject, in its organization and the treatment of the material and in its critical evaluation represents independent work on the part of the candidate.

Dr. J. JOHN SEKAR
M.A.,M.Phil.,PGDTE(CIEFL),PGDHE(IGNOU), PGDCE(UH), Ph.D.,
Head & Associate Professor
Research Department of English
Dean, Academic Policies & Administration
The American College, Madurai-625 002

**Dr. S. STANLEY MOHANDOSS STEPHEN**

Head (SF)

**Ms. S. SARADHA DEVI**

Guide & Supervisor

# Rachel Kushner's *The Mars Room:* A Postcolonial Feminist Study

Dissertation submitted to the Research Department of English,

The American College

in partial fulfillment of the requirements for the award of the Degree of

**Master of Arts** in **English**

by

**A.S.SHAEIKE FARRITA**

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MADURAI

**APRIL 2020**

# CERTIFICATE

This is to certify that the dissertation work titled **Rachel Kushner's *The Mars Room:* Postcolonial Feminist Study** is a record of research work out by **Ms. A.S.Shaeike Farrita (18PSE26)** under my guidance and supervision at the Research Department of English, The American College, Madurai. The project report has not previously formed the basis for any other research project or academic article and the report as a whole in its approach to the subject, in its organization and the treatment of the materials, and in its critical evaluation represents independent work on the part of the candidate.

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# THE ORCHARD OF LOST SOULS: A FEMINIST STUDY

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# A Marxist Reading: Neel Mukherjee's *A State of Freedom*

Project submitted to Postgraduate Department of English (SF), The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# A STUDY ON INVERTIBLE GRAPHS

**A Project work submitted to The American College (Autonomous)**

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# MINIMAL 2 POINT SET DOMINATING SET OF A GRAPH

**A Project work submitted to The American College (Autonomous)**

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# QUATERNIONS AND OTHER EXTENSIONS

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# PERTURBATION ANALYSIS OF THERMODIFFUSION, RADIATION AND HEAT GENERATION EFFECTS ON MHD CASSON FLUID FLOW OVER A SEMI-INFINTE MOVING VERTICAL PLATE IN A SLIP FLOW REGIME

**A Project work submitted to The American College (Autonomous)**

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**APRIL – 2020**

# DUFOUR EFFECTS ON HYDROMAGNETIC BOUNDARY LAYER FLOW OF A CASSON FLUID OVER A VERTICAL MOVING PLATE WITH CONVECTIVE BOUNDARY CONDITIONS IN PRESENCE OF HEAT SOURCE AND CHEMICAL REACTION

**A Project work submitted to The American College (Autonomous)**

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**APRIL – 2020**

# A STUDY ON STRONGLY G^*-CLOSED SETS IN TOPOLOGICAL SPACE

**A Project work submitted to The AmericanCollege (Autonomous)**

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# A New Method for Fuzzy Critical Path Analysis in Project Networks with a New Representation of Triangular Fuzzy Numbers

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# DOMINATION ON JAHANGIR GRAPH

**A Project work submitted to**
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# A STUDY ON DOMATIC NUMBER OF PETERSEN GRAPH

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# A STUDY ON INTUITIONISTIC FUZZY GRAPHS

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

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# BURNSIDE'S LEMMA AND ITS APPLICATIONS

**A Project work submitted to The American College (Autonomous)**

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# A STUDY ON INTUITIONISTIC FUZZY GRAPHS

**A Project work submitted to The American College (Autonomous)**

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# EDGE DOMINATION

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# A STUDY OF FUZZY LOGIC AND IT'S APPLICATION IN MEDICINE

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# NANO TOPOLOGY

**A Project work submitted to The American College (Autonomous)**

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**DEPARTMENT OF MATHEMATICS**

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**APRIL – 2020**

# EFFECT OF NON-UNIFORM HEAT SOURCE ON HYDROMAGNATIC BOUNDARY LAYER FLOW OF A WILLIAMSON FLUID FLOW OVER A EXPONENTIAL STRETCHING SURFACE IN A SLIP FLOW REGIME

**A Project work submitted to The American College (Autonomous)**

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**APRIL – 2020**

# ON THE DEGREE SPLITTING GRAPH AND THE $\gamma$ – SPLITTING GRAPH OF A GRAPH

**A Project work submitted to The American College (Autonomous)**

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# TOPOLOGICAL STRUCTURES THROUGH GRAPH THEORY AND ITS APPLICATION

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# THE G C D – SUM FUNCTION

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# INTUITIONISTIC FUZZY SET

**A Project work submitted to The American College (Autonomous)**
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# IMAGE PROCESSING USING FUZZY

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# NETWORK SECURITY USING MATHEMATICAL CRYPTOGRAPHY

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# Nano Generalized Open and Closed Sets

**A Project work submitted to The American College (Autonomous)**

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**APRIL – 2020**

# ELECTRICITY GENERATION BY BICYCLE

PROJECT REPORT

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF SCIENCE

IN PHYSICS


Submitted by

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APRIL 2020

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**M. Veeravignesh (17PHS61), N. Malaramuthan (17PHS27),**
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Madurai -02.

# CERTIFICATE

This is to certify that the dissertion entitled "**ELECTRICITY GENERATION BY BICYCLE**" submitted by **D. Manikandan (17PHS61), M. Veeravignesh (17PHS61), N. Malaramuthan (17PHS27), S. Suthersen (17PHS52)** in partial fulfillment for the degree of Bachelor of Science in Physics to Madurai Kamaraj University is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020.

This subject on which the desertion has been prepared in the original work and it has not previously formed the basis for the award of any degree / diploma or any other similar title.

SIGNATURE OF COORDINATOR

SIGNATURE OF THEGUIDE

# CRAFTY CULTIVATION PROJECT
# (Automation in Agriculture using IOT)

## PROJECT REPORT

Submitted in partial fulfilment for the award of the degree of

## BACHELOR OF SCIENCE

## IN PHYSICS




Submitted by

T.NAVEEN KUMAR (17PHS35)

M.VAISHNAVI (17PHS58)

M.K.VARSAPRATHIKSA (17PHS60)

**Under the Guidance of**

Dr. T.R.K. Priya Darzini, M.sc. M.Phil., HDIT., Ph.D.,

**DEPARTMENT OF PHYSICS (SF)**

THE AMERICAN COLLEGE

MADURAI- 02.

APRIL 2020

# BONAFIDE CERTIFICATE

This is to certify that the project work entitled, "CRAFTY CULTIVATION PROJECT (Automation in Agriculture using IOT)" is a bonafide record of the original work done by **T.NAVEEN KUMAR (17PHS35), M.VAISHNAVI (17PHS58), M.K.VARSAPRATHIKSA (17PHS60)** submitted to the UG (SF) department of physics, The American college, Madurai ,in partial fulfilment of the requirements for the award of the degree in Bachelor of science in the Department of Physics.

**Project Guide**

Dr. T.R.K. Priya Darzini, M.sc. M.Phil., HDIT., Ph.D.,

Department of Physics (SF)

The American College

Madurai -02.

# CERTIFICATE

This is to certify that the content of this project entitled, "**CRAFTY CULTIVATION PROJECT (Automation in Agriculture using IOT)**" submitted by **T.NAVEEN KUMAR (17PHS35), M.VAISHNAVI (17PHS58), M.K.VARSAPRATHIKSA (17PHS60)** in partial fulfilment for the degree of Bachelor of Science in Physics to Madurai Kamaraj University is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020.

This subject on which the desertion has been prepared in the original work and it has not previously formed the basis for the award of any degree/diploma or any other similar title.

SIGNATURE OF COORDINATOR

SIGNATURE OF THE GUIDE

# DECLARATION

We do here by declare that this dissertation entitled **“CRAFTY CULTIVATION PROJECT (Automation in Agriculture using IOT)””**submitted to the Department of physics (SF), The American College during the academic year 2019 -2020 for the award of degree of Bachelor of Science in physics in our original work and that has not previously formed the basis for the award of any degree/diploma or any other similar title.

# ACKNOWLEDGEMENT

Presentation inspiration and motivation have always played a key role in the success of any venture.

We wise to express our sincere thanks to Dr . (Mr) M. Davamani christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., Principal & Secretary, The American College, Madurai.

We are pay our deep sense of gratitude to Dr . (Mrs) R. Daphine, M.sc., M.Phil (phy)., M.Ed., MPhil (Edu)., Ph.D., coordinator Department of Physics (SF), The American college, Madurai for providing us the necessary facilities to carry out this experiment.

We feel to acknowledge our indebtedness and deep sense of gratitude to our guide Dr. T.R.K. Priya Darzini, M.sc. M.Phil., HDIT., Ph.D., Assistant Professor in Physics (SF), Department of Physics (SF), The American college, Madurai whose valuable guidance and kind supervision given to us throughout the course which shaped the present work as its show.

We have been singularly and separately blessed with our understanding and helpful family.

# ECG GRAPH MONITORING WITH AD8232 ECG SENSOR & ARDUINO

## PROJECT REPORT

Submitted in partial fulfilment for the award of the degree of

BACHELOR OF SCIENCE

IN PHYSICS


Submitted by

D.SONAIMUTHU (17PHS48)

G.SUDHAN (17PHS51)

T.UTHAYAMOORTHY (17PHS57)

M.DHARANI (17PHS67)

M.SURYAPRAKASH (17PHS68)


Under the Guidance of




Mrs. S.Vanipriyadharshini

M.Sc , M.Phil.,

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THE AMERICAN COLLEGE

MADURAI 02


APRIL 2020

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**ECG GRAPH MONITORING WITH AD8232 ECG SENSOR & ARDUINO"** is a bona-fide record of the original work done by **D.SONAIMUTHU(17PHS48) , G.SUDHAN(17PHS51), T.UTHAYAMOORTHY(17PHS57) , M.DHARANI(17PHS67), M.SURYAPRAKASH(17PHS68)** submitted to the UG (SF) department of physics, The American college, Madurai, in partial fulfilment of the requirements for the award of the degree in Bachelor of science in the Department of Physics.

Project Guide

Mrs. S.VaniPriyadharshini

Department of Physics (SF)

The American College

Madurai -02.

## CERTIFICATE

This is to certify that the dissertion entitled "**ECG GRAPH MONITORING WITH AD8232 ECG SENSOR & ARDUINO**" submitted by **D.SONAIMUTHU (17PHS48), G.SUDHAN (17PHS51), T.UTHAYAMOORTHY (17PHS57), M.DHARANI (17PHS67), M.SURYAPRAKASH (17PHS68)** in partial fulfilment for the degree of Bachelor of Science in Physics to Madurai Kamaraj University is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020.

This subject on which the desertion has been prepared in the original work and it has not previously formed the basis for the award of any degree/diploma or any other similar title.

SIGNATURE OF COORDINATOR

SIGNATURE OF THE GUIDE

# ULTRASONIC MOTION DETECTOR USING ARDUINO

## PROJECT REPORT

Submitted in partial fulfilment for the award of the degree of

## BACHELOR OF SCIENCE

## IN PHYSICS


Submitted by

S.HARSHINI (17PHS17)
B.JAYAMONICA (17PHS19)
A.MALINI (17PHS29)
M.MANOPRABHA (17PHS31)


**Under the Guidance of**


Mrs.Ruby, M.sc. M.Phil.,

**DEPARTMENT OF PHYSICS (SF)**

THE AMERICAN COLLEGE

MADURAI- 02.


APRIL 2020

# BONAFIDE CERTIFICATE

This is to certify that the project work entitled, "ULTRASONIC MOTION DETECTOR USING ARDUINO" is a bonafide record of the original work done by **S.HARSHINI(17PHS17),B.JAYAMONICA(17PHS19), A.MALINI(17PHS29),M.MANOPRABHA(17PHS31)** submitted to the UG (SF) department of physics, The American college, Madurai ,in partial fulfilment of the requirements for the award of the degree in Bachelor of science in the Department of Physics.

**Project Guide**

Mrs.Ruby M.sc. M.Phil.,

Department of Physics (SF)

The American College

Madurai -02.

# CERTIFICATE

This is to certify that the content of this project entitled, "**ULTRASONIC MOTION DETECTOR USING ARDUINO**

submitted by **S.HARSHINI(17PHS17),B.JAYAMONICA(17PHS19) , A.MALINI(17PHS29),M.MANOPRABHA(17PHS31)** in partial fulfilment for the degree of Bachelor of Science in Physics to Madurai Kamaraj University is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020.

This subject on which the desertion has been prepared in the original work and it has not previously formed the basis for the award of any degree/diploma or any other similar title.

SIGNATURE OF COORDINATOR

SIGNATURE OF THE GUIDE

# DECLARATION

We do here by declare that this dissertation entitled "**CRAFTY CULTIVATION PROJECT (Automation in Agriculture using IOT)**""submitted to the Department of physics (SF), The American College during the academic year 2019 -2020 for the award of degree of Bachelor of Science in physics in our original work and that has not previously formed the basis for the award of any degree/diploma or any other similar title.

# ACKNOWLEDGEMENT

Presentation inspiration and motivation have always played a key role in the success of any venture.

We wise to express our sincere thanks to Dr . (Mr) M. Davamani christober, M.Sc., M.Phil., M.Ed., PGDCA., Ph.D., Principal & Secretary, The American College, Madurai.

We are pay our deep sense of gratitude to Dr . (Mrs) R. Daphine, M.sc., M.Phil (phy)., M.Ed., MPhil (Edu)., Ph.D., coordinator Department of Physics (SF), The American college, Madurai for providing us the necessary facilities to carry out this experiment.

We feel to acknowledge our indebtedness and deep sense of gratitude to our guide Dr. T.R.K. Priya Darzini, M.sc. M.Phil., HDIT., Ph.D., Assistant Professor in Physics (SF), Department of Physics (SF), The American college, Madurai whose valuable guidance and kind supervision given to us throughout the course which shaped the present work as its show.

We have been singularly and separately blessed with our understanding and helpful family.

# A STUDY ON CORONAL MASS EJECTION FROM "2007-2018" (SOLAR CYCLE 24)

## A PROJECT REPORT

**Submitted in partial fulfilment for the award of the degree of**

**BACHELOR OF SCIENCE**

**IN PHYSICS**


**Submitted by**

**B.PRIYADHARSHINI (17PHS36)**

**P.VAISHNAVI (17PHS59)**

**C.VIVITHA (17PHS63)**

**P.K.YUVARAJ (17PHS64)**

**Under the Guidance of**

**Mrs .W.HANNAH BLESSY, M.sc, M. Phil,**

**Lecturer**

**DEPARTMENT OF PHYSICS (SF)**

**THE AMERICAN COLLEGE**




# BONAFIDE CERTIFICATE

**This is to certify that the project "A study on coronal mass ejection from 2007-2018" is a BONAFIDE work carried out by B.PRIYA DHARSHINI (17PHS36),P.VAISHNAVI (17PHS59),C.VIVITHA (17PHS63),P.K.YUVARAJ(17PHS64) for the partial fulfilment of the requirements for the award of the degree Bachelor of science in Physics , at the Department of Physics ,The American College ,Madurai under my guidance during the year 2019-2020 and this has been submitted elsewhere for degree.**


**Mrs. W. HANNAH BLESSY, M.sc., M. Phil.**

**Project Guide**

**Lecturer, Department of Physics**

**The American College,**

**Madurai-625002**

**Dr. R. DAPHINE, M.sc., M. Phil.**

**coordinator**

**Department of Physics**

**The American College,**

**Madurai -625002**

## *CERTIFICATE*

**This is to certify that the project "A study on coronal mass ejection in solar cycle 24" submitted to Madurai Kama raj University ,Madurai is in partial fulfilment of the requirements for the award done by B. PRIYA DHARSHINI (17PHS36), P. VAISHNAVI (17PHS59), C. VIVITHA (17PHS63), P. K . YUVARAJ (17PHS64), during the period of 2019-2020 of their study in the Department of Physics, under my supervision and guidance and dissertation has not formed the basis of any degree/Diploma /Fellowship /or any other similar title to have any candidate of any University .**

**Signature of guide** **signature of coordinator**

# CRYSTAL GROWTH BY SLOW EVAPORATION PROJECT REPORT

Submitted in partial fulfilment for the award of the degree of

## BACHELOR OF SCIENCE

## IN PHYSICS




Submitted by

S . M . Akash (17PHS05)

C . Bala Krishnan (17PHS08)

A . Karpaganathan (17PHS23)

M . Mithren (17PHS32)

M . Naveen Kanna (17PHS34)

**Under the Guidance of**

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MADURAI- 02

APRIL 2020

# BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**CYRSTAL GROWTH BY SLOW EVAPORATION''** is a bonafide record of the original work done by **SM AKASH(17PHS05), C BALAKRISHNAN (17PHS08), A KARPAGANATHAN(17PHS23) , M MITHREN(17PHS32), M NAVEEN KANNA(17PHS34)** submitted to the UG (SF) department of physics, The American college, Madurai, in partial fulfilment of the requirements for the award of the degree in Bachelor of science in the Department of Physics.

**Project Guide**

Mrs. S.Vani Priyadharshini M.Sc., M.Phil.,

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The American College

Madurai -02.

# CERTIFICATE

This is to certify that the content of this project entitled, **"CRYSTAL GROWTH BY SLOW EVAPORATION METHOD "**

submitted by **SM AKASH(17PHS05) , C BALA KRISHNAN(17PHS08)**
**A KARPAGANATHAN(17PHS23) , M MITHREN(17PHS32)**
**N NAVEEN KANNA(17PHS34)**

in partial fulfilment for the degree of Bachelor of Science in Physics to Madurai Kamaraj University is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020.

This subject on which the desertion has been prepared in the original work and it has not previously formed the basis for the award of any degree/diploma or any other similar title.

SIGNATURE OF COORDINATOR

SIGNATURE OF THE GUIDE

# WEATHER STATION

Submitted in partial fulfilment for the award of the degree of

## BACHELOR OF SCIENCE

## IN PHYSICS




Submitted by

B .Abishek (17PHS02)

V .Ajith kumar (17PHS03)

A .Jeevananthan(17PHS21)

A .Raghul kannan (17PHS37)

S .B.Raghunath (17PHS38)

S .Sakthivel (17PHS46)

**Under the Guidance of**

Mr. K .Moorthy, M.Sc., M.Phil.,

**DEPARTMENT OF PHYSICS (SF)**

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MADURAI- 02

APRIL 2020

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled "**WEATHER STATION**" is a bonafiderecord of the original work

done by **B ABISHEK (17PHS02),**

**V AJITH KUMAR (17PHS03) ,A JEEVANANTHAN (17PHS21) ,**

**A RAGHUL KANNAN (17PHS37), SB RAGHUNATH (17PHS38) ,S SAKTHIVEL (17PHS46)** submitted to the UG (SF) department of physics, The American college, Madurai, in partial fulfilment of the requirements for the award of the degree in

Bachelor of science in the Department of Physics.

**Project Guide**

Mr.K .Moorthy M.Sc., M.Phil.,
Department of Physics (SF)
The American College



Madurai -02.

# CERTIFICATE

This is to certify that the content of this project entitled, **"WEATHER STATION "**

submitted by **B ABISHEK(17PHS02) , V AJITH KUMAR(17PHS03) A JEEVANANTHAN(17PHS21) , A RAGHUL KANNAN(17PHS37) , SB RAGHUNATH(17PHS38) , S SAKTHIVEL(17PHS46)**

in partial fulfilment for the degree of Bachelor of Science in Physics to

Madurai Kamaraj University is based on the result of studies carried out

by them under my guidance and supervision during the academic year

2019-2020.

This subject on which the desertion has been prepared in the

original work and it has not previously formed the basis for the

award of any degree/diploma or any other similar title.



SIGNATURE OF COORDINATOR

SIGNATURE OF THE GUIDE

# POSTULATES FOR TELEPORTATION

PROJECT REPORT

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF SCIENCE

IN PHYSICS




Submitted by

P. Rahul Dev (17PHS39)

**Under the Guidance of**

Mr. K. Moorthy M.Sc., M.Phil.,

**DEPARTMENT OF PHYSICS (SF)**

THE AMERICAN COLLEGE

MADURAI 02

APRIL 2020

## BONAFIDE CERTIFICATE

This is to certify that the project work entitled **"POSTULATES FOR TELEPORTATION"** is a bona-fide record of the original work done by **P.Rahul dev (17PHS39)** submitted to the UG (SF) department of physics, The American College, Madurai, in partial fulfillment of the requirements for the award of the degree in Bachelor of science in the Department of Physics.

Project Guide

Mr .K. Moorthy M.Sc., M.Phil.,

Department of Physics (SF)

The American College

Madurai -02.

# CERTIFICATE

This is to certify that the dissertion entitled "**POSTULATES FOR TELEPORTATION**" submitted by **P. Rahul Dev(17PHS39)** in partial fulfillment for the degree of Bachelor of Science in Physics to Madurai Kamaraj University is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020.

This subject on which the desertion has been prepared in the originalwork and it has not previously formed the basis for the award of any degree / diploma or any other similar title.

SIGNATURE OF COORDINATOR

SIGNATURE OF THEGUIDE

# HEARTBEAT SENSOR USING ARDUINO

# (HEART RATE MONITOR)

PROJECT REPORT

Submitted in partial fulfilment for the award of the degree of

**BACHELOR OF SCIENCE**

**IN PHYSICS**




Submitted by

M.DHIVYA (17PHS12)

L.DIVYA LAKSHMI(17PHS13)

P.GANESH PANDI(17PHS14)

R.MALATHIKA(17PHS28)

V.RITHIKA(17PHS43)

**Under the Guidance of**

**Mrs.Vani priyadharshini**

**M.Sc,M.Phil.,**

**DEPARTMENT OF PHYSICS(SF)**

**THE AMERICAN COLLEGE**

**MADURAI 02**

**APRIL 2020**

# BONAFIDE CERTIFICATE

This is to certify that the project work entitled **"HEARTBEAT SENSOR USING ARDUINO"** is a bona-fide record of the original work done by **M.DHIVYA(17PHS12), L.DIVYALAKSHMI(17PHS13),P.GANESHPANDI(17PHS14), R.MALATHIKA(17PHS28), V.RITHIKA(17PHS43)** submitted to the UG (SF) department of physics,The American college ,Madurai,in partial fulfilment of the requirements for the award of the degree in Bachelor of science in the Department of Physics.

Project Guide

Mrs.Vani Priyadharshini

Department of Physics(SF)

The American College

Madurai -02.

# CERTIFICATE

This is to certify that the dissertion entitled **"HEARTBEAT SENSOR USING ARDIUNO"** submitted by **M.DHIVYA(17PHS12),L.DIVYALAKSHMI(17PHS13), P.GANESHPANDI(17PHS14), R.MALATHIKA(17PHS28), V.RITHIKA(17PHS43)** in partial fulfilment for the degree of Bachelor of Scinece in Physics to Madurai Kamaraj University is based on the result of studies carried out by them under my guidance and supervision during the academic year 2019-2020.

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SIGNATURE OF COORDINATOR

SIGNATURE OF GUIDE

# ACKNOWLEDGEMENT

We are very much grateful to Mrs. Vani Priyadharshini,M.sc.,M.Phil., Lecturer in Physics (SF) ,The American college, Madurai for suggesting us this project and for her dynamic and valuable guidance and eternal encouragement throughout the course of our study.

We wish to express our sincere thanks to Lecturer Dr. (Mrs) R. Daphine, M.sc., MPhil (phy)., M.Ed., MPhil (Edu)., Ph.D., coordinator Department of Physics (SF), The American college, Madurai for providing us the necessary facilities to carry out this experiment.

We have been singularly and separately blessed with our understanding and helpful family.

# CONSTRUCTION OF REFRACTIVE TELESCOPE

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**S. ABINESHWARAN (17PHY01)**

**A. ALPIN JAMES (17PHY05)**

**K. ANBUSELVAM (17PHY07)**

Under Guidance

**Dr. S. STEPHEN RAJKUMAR INBANATHAN, M.Sc., Ph.D., B.C.S.,**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled "**CONSTRUCTION OF REFRACTIVE TELESCOPE**" is carried out under the guidance of **Dr.S. STEPHEN RAJKUMAR INBANATHAN ,M.Sc.,Ph.D.,B.C.S.,** at Department of physics by **S. ABINESHWARAN(17PHY01), A. ALPIN JAMES(17PHY05), K. ANBUSELVAM(17PHY07)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017-2020.

**Dr. K. Gnanasekar**
**Head of the Department**
**UG Physics.**

**Dr. S. STEPHEN RAJKUMAR INBANATHAN**
**(Guide)**

## DECLARATION

We hereby declare that this project work for the degree of Bachelor of science in Physics entitled "**CONSTRUCTION OF REFRACTIVE TELESCOPE**" is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any University .

**Place: Madurai**
**Date:**

Signature of the Candidate



**(S.ABINESHWARAN)**

A. Alpin James

**(A. ALPIN JAMES)**



**(K. ANBUSELVAM)**

# EXPERIMENTAL VIEW OF FRESNEL'S LAW OF REFLECTION THROUGH DIELECTRIC

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**P.EDIN (17PHY19)**

**M.HABIB RAHMAN (17PHY23)**

**M.J.ZENITH RAJA (17PHY75)**

Under Guidance

**Dr.M.BEAULA RUBY KAMALAM M.Sc., M.Phil., P.hd.,**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled "EXPERIMENTAL VIEW OF FRESNEL'S LAW OF REFLECTION THROUGH DIELECTRIC" is carried out under guidance of Dr. M. BEAULA RUBY KAMALAM M.Sc., M.Phil., Ph.D., at Department of Physics by P.EDIN (17PHY19), M.HABIB RAHMAN (17PHY23), M.J.ZENITH RAJA(17PHY75) in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017-2020.



Dr.K.GNANASEKAR
Head of The Department
UG,physics



Dr.M.BEAULA RUBY KAMALAM
(Guide)

# DECLARATION

We herby declare that this project work for the degree of Bachelor of Science in Physics entitled "EXPERIMENTAL VIEW OF FRESNEL'S LAW OF REFLECTON THROUGH DIELECTRIC" is our original work and that, it has not previously formed the basis for the award of any Degree / Diploma by any candidate of any university.

Place: Madurai. Signature of the Candidate

Date:

P. Edin

[P.EDIN]

M. Habib Rahman

[M.HABIB RAHMAN]

M. J. Zenith Raja

[M.J.ZENITH RAJA]

# E-farming Using Ardunio – IDE software

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**B.P. HARIPRASAD(17PHY25)**

**A. MANO(17PHY41)**

**S.VIMALKANNAN(17PHY73)**

Under Guidance

**Dr.A.Robson Benjamin M.Sc., M.Phil., Ph.D.,**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

*This is to certify that this project work entitled* ***E- farming Using Ardunio – IDE software*** *is carried out under the guidance* ***of*** **Dr.A.Robson Benjamin M.Sc., M.Phil.,Ph.D** *at Department of Physics by* **B. P. HARIPRASAD(17PHY25), A. MANO(17PHY41), S. VIMAL KANNAN (17PHY73)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period of 2017-2020.



**Dr.K.Gnanasekar**

Head of The Department

UG Physics.



**Dr.A.Robson Benjamin**

(Guide)

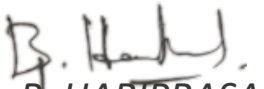
# DECLARATION

**We here by declare that this project work for the degree of Bachelor of ScienceinPhysicsentitled"E- farming Using Ardunio – IDE software" is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.**

Place: Madurai

Signature of the Candidate

Date:



***B.** P. HARIPRASAD*



A. MANO



S. VIMAL KANNAN

# STUDY OF NUVOTON MICRO – CONTROLLER

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**M.PREM KUMAR (17PHY54)**
**M.VIGNESHWARAN (17PHY71)**
**P.NIVAS (17PHY76)**

Under the guidance of

**Dr.A. Robson Benjamin, M.Sc., M.Phil., Ph.D.,**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled **'STUDY OF NUVOTON MICRO-CONTROLLER'** is carried out under the guidance of **Dr.A. Robson Benjamin, M.Sc., M.Phil., Ph.D.,** At Department of Physics by **M.PREM KUMAR (17PHY54) M.VIGNESHWARAN (17PHY71) P.NIVAS (17PHY76)** in partial fulfillment of the requirement for the award of the degree of Bachelor of science in Physics during the period 2019 – 2020.



**Dr.K.Gnanasekar**
Head of the Department
UG Physics



**Dr.A. Robson Benjamin**
(Guide)

# DECLARATION

We hereby declare that this project work for the degree of Bachelor of Science in Physics entitled **'STUDY OF NUVOTON MICRO-CONTROLLER'** is our original work and it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any University.

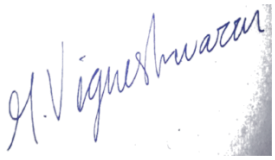
Place: Madurai

Date:

Signature of the Candidate



(S.PREM KUMAR)



(M.VIGNESHWARAN)



(S.NIVAS)

# STUDY OF LIMB DARKENING EFFECT

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

**By**

**S. Ram Prakash (17PHY55)**

**A. Shiny Wilson (17PHY59)**

**K. Karthic Kumar (17PHY78)**

Under the guidance of

**Dr. S. Stephen Rajkumar Inbanathan, B.Sc., M.Sc., B.C.S., Ph.D.,**

**Since 1881**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

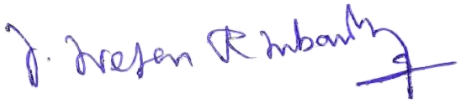
April 2020

# CERTIFICATE

This is to certify that this project work entitled **"STUDY OF LIMB DARKENING EFFECT"** is carried out under the guidance of Dr. S. Stephen Rajkumar Inbanathan, B.Sc., M.Sc., B.C.S., Ph.D., at Department of Physics by S. Ram Prakash(17PHY55), A. Shiny Wilson(17PHY59), K. Karthic Kumar(17PHY78) in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the Period of 2017-2020.



**Dr. K. Gnanasekar**
**Head of The Department**
**UG Physics.**



**Dr. S. Stephen Rajkumar Inbanathan,**
**(Guide)**

# Declaration

We hereby declare that this project work for the degree of Bachelor of science in Physics entitled “Solar Limb Darkening Effect” is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any University .

Place: Madurai
Date:

Signature of the Candidate

(S. Ram Prakash)

(A. Shiny Wilson)

(K. Karthic Kumar)

# MULTITYPE FINGERPRINT DOOR LOCK

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**S.AMARRAJA(17PHY06)**

**G.ARAVIND(17PHY09)**

**G.GOPINATH(17PHY21)**

Under Guidance

**Dr.A.Robson Benjamin M.Sc., M.Phil.,Ph.D.,**

Department of UG physics

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(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled **MULTITYPE FINGERPRINT DOOR LOCK** is carried out under the guidance **of Dr.A.Robson Benjamin M.Sc., M.Phil.,Ph.D** at Department of Physics by **S.AMARRAJA(17PHY06) G.ARAVIND(17PHY09) G.GOPINATH(17PHY21)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period of 2017-2020.



**Dr.K.Gnanasekar**
Head of The Department
UG Physics.



**Dr.A.Robson Benjamin**
(Guide)

# DECLARATION

We here by declare that this project work for the degree of Bachelor of Science in Physics entitled **"MULTITYPE FINGERPRINT DOOR LOCK"** is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place: Madurai
Date:

Signature of the Candidate

S.AMARRAJA

G.ARAVIND

G.GOPINATH

# Quantum Electrodynamics & FEYNMANDIAGRAMS

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**N.Lucknesh (17PHY38)**

**M.Samuel (17PHY56)**

**N.Naresh (17PHY45)**

Under Guidance

**Dr.K.Gnanasekar M.Sc., M.Phil., Ph.D.,**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled "**QUANTUM ELECTRODYNAMICS & FEYNMAN DIAGRAMS"** is carried out under the guidance of **Dr.K.Gnanasekar M.Sc.,M.Phil.,Ph.D** at Department of Physics by **N.LCKNESH(17PHY38)**, **M.Samuel(17PHY56)**, **N.Naresh (16PHY45)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017-2020.

**Dr.K.Gnanasekar**
Head Of The Department
UG Physics

**Dr.K.Gnanasekar**
(Guide)

# DECLARATION

We hereby declare that this project work for the degree of Bachelor of Science in Physics entitled "**QUANTUM ELECTRODYNAMICS & FEYNMAN DIAGRAMS**" is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

*Place*: Madurai

Date:

Signature of the Candidate



***(N.Lucknesh)***



***(M.Samuel)***



***(N.Nares)***

# SOLAR RADIO BURST

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**S. Britto (17PHY15)**
**G. K. Sri Arun (17PHY63)**
**J. Staines Obed James (17PHY64)**

Under Guidance

**Dr.M.BEAULA RUBY KAMALAM M.Sc.,M.Phil.,Ph.D**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.
April 2020

## CERTIFICATE

This is to certify that this project work entitled "**SOLAR RADIO BURST"** is carried out under the guidance of **Dr.M.BEAULA RUBY KAMALAM M.Sc.,M.Phil.,Ph.D** at Department of Physics by **S.BRITTO (17PHY15), G.K.SRI ARUN (17PHY63), J.STAINES OBED JAMES (17PHY64)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017-2020.



**Dr.K.Gnanasekar**
Head Of The Department,
UG Physics,
The American College.



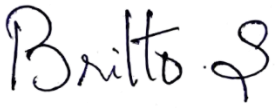
**Dr. M. Beaula Ruby Kamalam**
(Guide)

# DECLARATION

We hereby declare that this project work for the degree of Bachelor of Science in Physics entitled "**SOLAR RADIO BURST"** is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place: Madurai
Date:

Signature of the Candidate



**(S. BRITTO)**



**(G.K.SRI ARUN)**



**(J. STAINES OBED JAMES)**

# QUANTUM BOUND STATES OF NANO STRUCTURES

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**J . NATHANAEL JOHN (17PHY46)**

**P. PETHANAKUMAR (17PHY51)**

**J. PONSELVAM (17PHY52)**

Under Guidance

**Dr. K. GNANASEKAR M.Sc., M.Phil., Ph.D**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled " **QUANTUM BOUND STATES OF NANO STRUCTURES**" is carried out under the guidance of **Dr. K. GNANASEKAR M.Sc., M.Phil., Ph.D** at Department of Physics by **J.NATHANAEL JOHN (17PHY46), P.PETHANAKUMAR (17PHY51), J. PONSELVAM (17PHY52)** in partial fulfillment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017 – 2020.



**Dr.K.Gnanasekar**
Head of the Department
UG Physics



**Dr.K.Gnanasekar**
(Guide)

# DECLARATION

We hereby declare that this project work for the degree of Bachelor of science in Physics entitled "**QUANTUM BOUND STATES OF NANO STRUCTURES** '' is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place: Madurai

Date:

Signature of the Candidate



(J.NATHANAEL JOHN)



(P.PETHANAKUMAR)



(J.PONSELVAM)

# AUTOMATED CAR PARKING SYSTEM

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**Gowtham.V.C (17PHY22)**

**Lakshumana kumar.M (17PHY36)**

Under Guidance
**Dr.A.Robson Benjamin M.Sc., M.Phil.,Ph.D.,**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.
April 2020

# CERTIFICATE

This is to certify that this project work entitled **AUTOMATED CAR PARKING SYSTEM** is carried out under the guidance **of Dr.A.Robson Benjamin M.Sc., M.Phil.,Ph.D** at Department of Physics by **Gowtham.V.C (17PHY22) Lakshumana kumar.M (17PHY36)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period of 2017-2020.



**Dr.K.Gnanasekar**

Head of The Department

UG Physics.



**Dr.A.Robson Benjamin**

(Guide)

# DECLARATION

We here by declare that this project work for the degree of Bachelor of Science in Physics entitled **"Automated car parking system"** is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place: Madurai
Date:

Signature of the Candidate



(Gowtham.V.C)



(Lakshumana Kumar.M)

# Calculating value of g Using microcontroller

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**S .Shanmugam shundharam(17PHY58)**

**B. Sivapandi(17PHY60)**

**A.C.Vignesh Karthick(17PHY69)**

Under Guidance

**Dr. A. Robson Benjamin M.Sc., M.Phil.,Ph.D**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled **Calculating Value of g using microcontroller** is carried out under the guidance **of Dr. A.Robson Benjamin M.Sc., M.Phil.,Ph.D** at Department of Physics by **Sivapandi(17phy60) , shanmuga shundaram (17phy58) ,A.C.Vignesh Karthick (17PHY69)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period of 2017-2020.



**Dr.K.Gnanasekar**
Head of The Department
UG Physics.



**Dr. A.Robson Benjamin**
(Guide)

# DECLARATION

We here by declare that this project work for the degree of Bachelor of Science in Physics entitled " CALCULATING VALUE OF G USING MICROCONTROLLER "is our original work and that,it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place:Madurai

Date:

Signature of the Candidate

S. Shanmuga sundaram

S.Shanmuga shundaram

B.Siva Pandi

B.Sivapandi

A.C.Vignesh Karthick

A.C.Vignesh Karthick

# Water Irrigation System using Arduino

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**R. MANIGANDAN (17PHY39)**

**K. SIVASANKARAN (17PHY61)**

**M. URKALAKANNAN (17PHY66)**

Under Guidance

**Dr. A. ROBSON BENJAMIN M.sc.,M.Phil.,Ph.D.,**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled **"WATER IRRIGATION SYSTEM USING ARDUINO UNO"** is carried out under the guidance of **Dr. A. ROBSON BENJAMIN M.sc.,M.Phil.,Ph.D.,** at Department of Physics by **R. MANIGANDAN (17PHY39), K. SIVASANKARAN (17PHY61), M. URKALAKANNAN (17PHY66)** in partial fulfillment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017-2020.



**Dr. K. Gnanasekar**
Head of the Department
UG Physics



**Dr. A. ROBSON BENJAMIN**
(Guide)

# DECLARATION

We hereby declare that this project work for the degree of Bachelor of Science in Physics entitled **"WATER IRRIGATION SYSTEM USING ARDUINO UNO"** is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place: Madurai

Date:

Signature of the Candidate

(R. MANIGANDAN)

(K. SIVASANKARAN)

(M.URKALAKANNAN)

# SMART BLIND STICK USING ARDUINO

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**A.ANDREWS (17PHY08)**

**R.LOKESHWAR (17PHY37)**

**M.VATSAN(17PHY68)**

Under Guidance

**Dr.A.Robson Benjamin M.Sc., M.Phil.,Ph.D**




Department of UG physics
The American College
(An autonomous institution affiliated to Madurai Kamarajar University)
Madurai 625 002.
April 2020

# CERTIFICATE

This is to certify that this project work entitled **SMART BLIND STICK USING ARDUINO** is carried out under the guidance **of Dr.A.Robson Benjamin M.Sc., M.Phil.,Ph.D** at Department of Physics **A.ANDREWS (17PHY08), R.LOKESHWAR (17PHY37), M.VATSAN(17PHY68)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period of 2017-2020.



**Dr.K.Gnanasekar**
Head of The Department
UG Physics.



**Dr.A.Robson Benjamin**
(Guide)

# DECLARATION

We here by declare that this project work for the degree of Bachelor of Science in Physics entitled **"BLIND STICK USING ARDUINO"** is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place: Madurai
Date:

Signature of the Candidate



A.ANDREWS



R.LOKESHWAR



M.VATSAN

# CONSTANT CURRENT (AC) SOURCE

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**R.ARIVANANDHA VISAK (17PHY10)**

**S.BALAJI (17PHY12)**

**R.KRISHNAKUMAR (17PHY35)**

Under Guidance

**Mr. B. Rajesh M.Sc.,**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled "**CONSTANT CURRENT (AC) SUPPLY"** is carried out under the guidance of **Mr. B. Rajesh M.Sc.,** at the Department of Physics by **R.ARIVANANDHA VISAK (17PHY10), S.BALAJI (17PHY12), R.KRISHNAKUMAR (17PHY35)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017-2020.



**Dr.K.Gnanasekar**

Head of the Department

UG Physics.



**Mr.B.Rajesh**

(Guide)

# DECLARATION

We hereby declare that this project work for the degree of Master of Science in Physics entitled **" CONSTANT CURRENT (AC) SUPPLY"** is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any Candidate of any University

By

**R.ARIVANANDHA VISAK**

**S.BALAJI**

**R.KRISHNAKUMAR**

Place: Madurai

Date:

# SOLAR COOKER USING PARABOLIC CONCENTRATOR

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**Ajith Kumar.S (17PHY02)**

**Hari Vignesh.P (17PHY24)**

**Jawahar.K (17PHY27)**

Under Guidance

**Dr. M. BEAULA RUBY KAMALAM M.Sc., M.Phil.,Ph.D.,**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled **SOLAR COOKER USING PARABOLIC CONCENTRATOR** is carried out under the guidance **of Dr. M. BEAULA RUBY KAMALAM M.Sc., M.Phil., Ph.D** at Department of Physics by **Ajith Kumar.S (17PHY02) , Hari Vignesh.P (17PHY24), Jawahar.K (17PHY27)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period of 2017-2020.



**Dr.K.Gnanasekar**
Head of The Department
UG Physics.



**Dr.M.Beaula Ruby Kamalam**
(Guide)

# DECLARATION

We here by declare that this project work for the degree of Bachelor of Science in Physics entitled **"SOLAR COOKER USING PARABOLIC CONCENTRATOR"** is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place: Madurai
Date:

Signature of the Candidate



(Ajith Kumar)



(HariVignesh.P)



(Jawahar.K)

# MODERN HOUSE

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**M. KARTHIKEYAN (17PHY33)**

**V. PAVANKALYAN (17PHY49)**

**A. VINOTH SERMARAJAN (17PHY74)**

Under Guidance

**Dr. M. BEAULA RUBY KAMALAM M.Sc., M.Phil., Ph.D.,**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled "**MODERN HOUSE**" is carried out under guidance of **Dr. M. BEAULA RUBY KAMALAM M.Sc., M.Phil., Ph.D.,** at Department of Physics by **M. KARTHIKEYAN (17PHY33), V. PAVANKALYAN (17PHY49), A. VINOTH SERMARAJAN (17PHY74)** in partial fulfilment of the requirement for the award of thedegree of Bachelor of Science in Physics during the period 2017- 2020.



**Dr. K. GNANASEKAR**
Head of The Department
UG physics



**Dr. M. BEAULA RUBY KAMALAM**
(Guide)

## DECLARATION

We herby declare that this project work for the degree of Bachelor of Science in Physics entitled "**MODERN HOUSE**" is our original work and that, it has not previously formed the basis for the award of any Degree / Diploma by any candidate of any university.

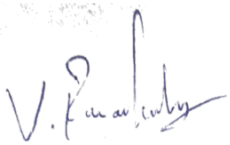
Place: Madurai

Date:

Signature of the Candidate



(M. KARTHIKEYAN)



(V. PAVANKALYAN)



(A. VINOTHSERMARAJAN)

# TEMPERATURE MEASUREMENT USING ESP32 MICROCONTROLLER

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**S.MANIKA PRAKASH(17PHY40)**

**P.J.VIGNESHWAR (17PHY70)**

**K.VIJI KUMAR(17PHY72)**

Under Guidance

**Dr.A.ROBSON BENJAMIN M.Sc.,M.Phil.,Ph.D.,**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled "**TEMPERATURE MEASUREMENT USING ESP32 MICROCONTROLLER**" is carried out under the guidance of **Dr.A.ROBSON BENJAMIN M.Sc.,M.Phil.,Ph.D.,** at Department of Physics by **S.MANIKA PRAKASH (17PHY40), P.J.VIGNESHWAR (17PHY70), K.VIJI KUMAR(17PHY72)** in partial fulfilment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017 - 2020..



**Dr.K.Gnanasekar**
Head Of The Department
UG Physics



**Dr.A.ROBSON BENJAMIN**
(Guide)

## DECLARATION

We hereby declare that this project work for the degree of Bachelor of Science in Physics entitled "**TEMPERATURE MEASUREMENT USING ESP32 MICROCONTROLLER**" is our original work and that, it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any university.

Place: Madurai
Date:

Signature of the Candidate

S. Manika Prakash.

**(S.MANIKA PRAKASH)**

**(P.J.VIGNESHWAR)**

K. Viji Kumar

**(K.VIJI KUMAR)**

# STUDY OF SUNIMAGES BY PINHOLE AND WEBCAM METHODS

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**P.JOSHUA EDWIN JEFFERY (17 PHY 30)**

**S.KANNAN (17 PHY 31)**

**R.KARTHICK RAJA (17 PHY 32)**

Under Guidance

**Dr. S. STEPHEN RAJKUMAR INBANATHAN, M.Sc., Ph.D., B.C.S.,**




Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that the project work entitled **STUDY OF SUN IMAGES BY PINHOLE AND WEBCAM METHODS** carried out by **P. JOSHUA EDWIN JEFFERY (17 PHY 30), S. KANNAN (17 PHY 31), R. KARTHICK RAJA (17 PHY 32)** under the guidance of **Dr. S. STEPHEN RAJKUMAR INBANATHAN, M.Sc., Ph.D** at Department of Physics is a bonafide record for the partial fulfillment of requirement for the award of degree of BACHELOR OF SCIENCE IN PHYSICS during the year 2017-2020.



**Dr. K. GNANASEKAR**
**Head of the Department**
**UG Physics**



**Dr. S. STEPHEN RAJKUMAR INBANATHAN**
**(Guide)**

## DECLARATION

We hereby declare that this project work entitled **"STUDY OF SUN IMAGES BY PINHOLE AND WEBCAM METHODS"** is our original work and no part of the project work has been submitted earlier, in full or part, for any Diploma or Degree of this or any other College or University.

Place: Madurai
Date :

Signture of the Candidate

**P.JOSHUA EDWIN JEFFERY (17 PHY 30)**

**S.KANNAN (17 PHY 31)**

**R.KARTHICK RAJA (17 PHY 32)**

# MEASUREMENT OF HIGH TEMPERATURE OBJECT USING OPTICAL PYROMETER

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**P.ALEX PANDIAN (17PHY04)**

**S.DHINESH KUMAR (17PHY17)**

**A.C. DINAGARAN (17PHY18)**

Under Guidance

**Dr . D .DAVID JEBARAJ M.sc .,MPhil., PhD.,**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certificate that this project work entitled "**MEASURING HIGH TEMPERATURE OBJECT USING THE OPTICAL PYROMETER**" is carried out under the guidance of **Dr . D .DAVID JEBARAJ M.sc .,MPhil., PhD.,** At the department of physics by **P.ALEX PANDIAN (17PHY04), S.DHINESH KUMAR (17PHY17), A.C.DINAGARAN(17PHY18)** in the partial fulfilment of the requirement for the award of the degree of Bachelor of Science in physics during the period 2017-2020.



**Dr. K. Gnanaseker**
Head of the Department
UG physics



**Dr.D.David jebaraj**
(Guide)

# DECLARATION

We hereby declare that this project work for the degree of the Bachelor of science in physics entitled " **MEASURING THE HIGH TEMPERATURE SOUCRE USING OPTICAL PYROMETER** " is our original work and that , it has not previously formed the basis for the award of any Degree / Diploma by any candidate of any university.

Place: Madurai
Date:

Signature of the Candidate

**P.ALEX PANDIAN (17PHY04)**

**S.DHINESH KUMAR (17PHY17)**

**A.C.DINAGARAN (17PHY18)**

# THE SOLAR TRACKER

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By


**M.S.KEVIN JOESHI (17PHY34)**

**A.IJAJ AHAMED ABDULLAH (17PHY26)**

**M.SUBRAMANIAN (17PHY65)**


Under Guidance

**Dr. S. STEPHEN RAJKUMAR INBANATHAN, M.Sc., Ph.D., B.C.S.,**


Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.


April 2020

# CERTIFICATE

This is to certify that this project work entitled **'THE SOLAR TRACKER'** is carried out under the guidance of **Dr. S. Stephen Rajkumar Inbanathan, M.Sc., B.C.S., Ph.D.,** At Department of Physics by **M.S.KEVIN JOESHI (17PHY34), A.IJAJ AHAMED ABDULLAH (17PHY26), M.SUBRAMANIAN (17PHY65)** in partial fulfillment of the requirement for the award of the degree of Bachelor of science in Physics during the period 2019 – 2020.



**Dr.K.Gnanasekar**
Head of the Department
UG Physics



**Dr. S. Stephen Rajkumar Inbanathan**
(Guide)

# DECLARATION

We hereby declare that this project work for the degree of Bachelor of Science in Physics entitled **'THE SOLAR TRACKER'** is our original work and it has not previously formed the basis for the award of any Degree/Diploma by any candidate of any University.

Place: Madurai
Date:

Signature of the Candidate



(M.S.KEVIN JOESHI)



(A.IJAJ AHAMED ABDULLAH)



(M.SUBRAMANIAN)

# ELECTROMAGNETIC LEVITATION

A dissertation submitted to The American College

In partial fulfilment of the Requirements for the degree of

**BACHELOR OF SCIENCE In**

**PHYSICS**

By

**C. CHANDRA KANDH (17PHY16)**

**K. PARATH(17PHY47)**

**R. PARTHA SARATHY(17PHY48)**

Under Guidance

**Dr. M. BEAULA RUBY KAMALAM M.Sc., M.Phil., Ph.D.,**

Department of UG physics

The American College

(An autonomous institution affiliated to Madurai Kamarajar University)

Madurai 625 002.

April 2020

# CERTIFICATE

This is to certify that this project work entitled "**ELECTROMAGNETIC LEVITATION**" is carried out under guidance of **Dr. M. BEAULA RUBY KAMALAM M.Sc., M.Phil., Ph.D.,** at Department of Physics by

**C. CHANDRA KANDH (17PHY16), K. PARATH(17PHY47), R. PARTHA SARATHY(17PHY48)** partial fulfillment of the requirement for the award of the degree of Bachelor of Science in Physics during the period 2017-2020.



**Dr. K. GNANASEKAR**
Head of The Department
UG physics



**Dr. M. BEAULA RUBY KAMALAM**
(Guide)

# DECLARATION

We here by declare that this project work for the degree of Bachelor of Science in Physics entitled "**ELECTROMAGNETIC LEVITATION**" is our original work and that, it has not previously formed the basis for the award of any Degree / Diploma by any candidate of any university.

Place:Madurai
Date:

Signature of the Candidate



C. CHANDRA KANDH (17PHY16)



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# PROJECT LAB

# PHY 3672

| Group | Roll No | Name | Project Title | Staff Guide |
|---|---|---|---|---|
| 1 | 17PHY01 | S. Abineshwaran | Refractive Telescope | SRI |
| | 17PHY05 | A. Alpin James | | |
| | 17PHY07 | K. Anbu Selvam | | |
| 2 | 17PHY19 | P. Edin | Verification of fresnel law of reflection using dielectric | BRK |
| | 17PHY23 | M. Habib Rahman | | |
| | 17PHY75 | M.J. Zenith Raja | | |
| 3 | 17PHY41 | A. Mano | e-farming using soil moisture(Using Arduino) | ARB |
| | 17PHY25 | B.P. Hari Prasad | | |
| | 17PHY73 | S. Vimal Kannan | | |
| 4 | 17PHY54 | M. Prem Kumar | Study on Nuvoton chip | ARB |
| | 17PHY71 | M. Vigneshwaran | | |
| | 17PHY76 | P. Nivas | | |
| 5 | 17PHY55 | S. Ram Prakash | Measurement of Solar limb darkening | SRI |
| | 17PHY59 | A. Shiny Wilson | | |
| | 17PHY78 | K. Karthic Kumar | | |
| 6 | 17PHY09 | G. Aravind | Multi-type of fingerprint Door lock | ARB |
| | 17PHY06 | S. Amar raja | | |
| | 17PHY21 | G. Gopinath | | |

| | | | | |
|---|---|---|---|---|
| **7** | 17PHY38 | N. Lucknesh | Feynman Diagram | **KG** |
| | 17PHY45 | N. Naresh | | |
| | 17PHY56 | M. Samuel | | |
| **8** | 17PHY15 | S. Britto | Study of Solar Radio Burst | **BRK** |
| | 17PHY63 | G.K. Sri Arun | | |
| | 17PHY64 | J. Staines Obed James | | |
| **9** | 17PHY46 | J. Nathanael John | Quantum bound states of Nano structures | **KG** |
| | 17PHY51 | P. Pethana Kumar | | |
| | 17PHY52 | J. Pon Selvam | | |
| **10** | 17PHY22 | C. Gowtham | Automatic Car Parking System | **ARB** |
| | 17PHY36 | M. Lakshmana Kumar | | |
| **11** | 17PHY58 | S. Shanmuga Sundaram | Calculating Value of g using microcontroller | **ARB** |
| | 17PHY60 | B. Sivapandi | | |
| | 17PHY69 | A.C. Vignesh Karthick | | |
| **12** | 17PHY39 | R. Manigandan | Water Irrigation System using Arduino | **ARB** |
| | 17PHY61 | K. Sivasankaran | | |
| | 17PHY66 | M. Urkala Kannan | | |
| **13** | 17PHY08 | A. Andrews | Smart blind stick using Arduino | **ARB** |
| | 17PHY37 | R. Lokeshwar | | |
| | 17PHY68 | M. Vatsan | | |
| **14** | 17PHY10 | R. Arivanandha Visak | LCR Circuit | **BR** |
| | 17PHY12 | S. Balaji | | |
| | 17PHY35 | R. Krishna Kumar | | |

| | | | | |
|---|---|---|---|---|
| **15** | 17PHY02<br>17PHY24<br>17PHY27 | S. Ajith Kumar<br>P. Hari Vignesh<br>K. Jawahar | Solar Cooker | **BRK** |
| **16** | 17PHY33<br>17PHY49<br>17PHY74 | M. Karthikeyan<br>V. Pavan Kalyan<br>A. Vinoth Sermarajan | Modern House | **BRK** |
| **17** | 17PHY40<br>17PHY70<br>17PHY72 | S. Manika Prakash<br>P.J. Vigneshwar<br>K. Viji Kumar | Temperature measurement using Microcontroller | **ARB** |
| **18** | 17PHY30<br>17PHY31<br>17PHY32 | P. Joshva<br>S. Kannan<br>R. Karthick Raja | Biosynthesis of Zno Nanostructure from plant extract for Antibacterial Applications | **SRI** |
| **19** | 17PHY04<br>17PHY17<br>17PHY18 | A. Alex Pandian<br>S. Dinesh Kumar<br>A.C. Dinagaran | Measuring temperature of atomic spectra by using Pyrometer(Optical) | **DD** |
| **20** | 17PHY34<br>17PHY26<br>17PHY65 | M.S. Kevin Joeshi<br>A. Ijaj Ahamed Abdullah<br>M. Subramanian | Solar Sun Tracking | **SRI** |
| **21** | 17PHY16<br>17PHY47<br>17PHY48 | C. Chandrakanth<br>K. Parath<br>R. Parthasarathy | Study of Electromagnetic field and magnetic river | **BRK** |

# A Traumatic Study of Khaled Hosseini's *The Kite Runner*:A Novel

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
**Master of Arts** in **English**

By

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**MADURAI.**

**APRIL 2020**

# A Psychoanalytical Study of *What We Lose*

Project submitted to Postgraduate Department of English (SF), The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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April 2020

# Alain Mabanckou's *Black Moses*: A Marxist Study

Dissertation submitted to the Research Department of English, The American College
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# *THE MEENAKSHI AMMAN TEMPLE AS A CULTURAL IDENTITY OF MADURAI - A STUDY*

Project submitted to the Research Department of English, The American College in partial fulfillment of the requirements for the award of the Degree of

**Master of Arts in English**

by

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# JOHN GREEN'S THE FAULT IN OUR STARS : A PSYCHOANALYTIC STUDY

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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**MAY/JUNE 2020**

# Samanth Subramanian's *This Divided Island*: A New Historicist Study

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
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**APRIL 2020**

# Kapil Raj's *Endurer A Rape Story*: A Feministic Approach

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
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**MAY/JUNE 2020 CERTIFICATE**

# The Politics Of Space And Place In Kiran Desai's The Inheritance Of Loss

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# Id Vs Superego in Anna Burn's *Milkman*

Dissertation submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
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# Preeti Shenoy's *The Rule Breakers:* A Feminist Reading

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# Rachel Kushner's *The Mars Room:* A Postcolonial Feminist Study

Project submitted to the Research Department of English, The American College in fulfillment of the requirements for the award of the Degree of

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**MAY/JUNE 2020**

# Alex Michaelide's The Silent Patient: A Psychoanalytical study

Project submitted to the Research Department of English (SF), The American College in partial fulfilment of the requirements for the award of the Degree of
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**April 2020**

# Chimamanda Ngozi Adichie's *Americanah*: An Ethnocentric Study

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
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**MAY/JUNE 2020**

# Loss of American Dream in Imbolo Mbue's *Behold the Dreamers:* A Diasporic Study

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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APRIL 2020

# THE ORCHARD OF LOST SOULS: A FEMINIST STUDY

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
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**APRIL 2020** --------Section Break(Next Page)--------

# Cross-Cultural Invasion in Madurai – A Study

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# A Marxist Reading: Neel Mukherjee's *A State of Freedom*

Project submitted to Postgraduate Department of English (SF), The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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**APRIL 2020**

# Rationalising the twisted minds: Behavioral Analysis of the Psychopath in *Rattle*

Project submitted to Postgraduate Department of English (SF), The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# A Postcolonial Reading on Select Poems of Meena Kandasamy

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
**Master of Arts in English**

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**APRIL 2020**

# SHOBHA ROA'S *GIRLS BURN BRIGHTER*: A STUDY IN RADICAL FEMINISM

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# A Subaltern Study of Assaf Gavron's *Almost Dead: A Novel*

Dissertation submitted to the Research Department of English, The American College
in partial fulfilment of the requirements for the award of the Degree of
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APRIL 2020

# SEXUAL ORIENTATION IN SAIKAT MAJUMDAR'S SCENT OF GOD

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**


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# Revathi's *Vellai Mozhi:* A Psychoanalytic Study

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts in English**

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# Translation of lyndsey Stonebridge's "That Which You are Denying Us" into Tamil

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# ECO-CATASTROPHE IN *THE ROAD*

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# DISINTEGRATION OF NATIONAL IDENTITY IN ANIRUDH KALA'S SELECT SHORT STORIES

Dissertation submitted to the Research Department of English, The American College
in partial fulfilment of the requirements for the award of the Degree of
**Master of Arts** in **English**

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# Women vs. Society in Elena Ferrante's *My Brilliant Friend*

Dissertation submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
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# Child Sexual Abuse in Pinkie Virani's *Bitter Chocolate: Child Sexual Abuse in India*: A Psychoanalytical Study

Project submitted to the Research Department of English, The American College in partial fulfillment of the requirements for the award of the Degree of

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# Marxist Criminology in Manoranjan Byapari's *There's Gunpowder in the Air*

Dissertation submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# Social Constructiveness of Masculinity in Perumal Murugan's *Ardhanaari*

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**


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**APRIL2020**

# Amitav Ghosh's *Gun Island*: A Study in Green Politics

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# Violence Against Blacks in Angie Thomas's *The Hate U Give*: A Postcolonial Reading

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# Translation of select essay from Ecofeminism by Maria Mies and Vandana Shiva.

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# POLITICS OF RAPE IN ROXANE GAY'S *AN UNTAMED STATE.*

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# MAGICAL REALISM: A STUDY OF MURAKAMI'S *KAFKA ON THE SHORE*

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# REPRESSION: A PSYCHOLOGICAL STUDY OF *EM AND THE BIG HOOM*

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# The Study of Gender and Sexuality in *The Vegetarian* by Han Kang

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# SOCIETY VS INDIVIDUALS IN PREETSHENOY'S *THE RULE BREAKERS*

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# The Study of Gender and Sexuality in *The Vegetarian* by Han Kang

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# Emergence of Women in Anita Nair's *Eating Wasps*

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# Stuart Hall's Cultural Studies and Theoritical Legacies in Tamil: a Translation.

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# SURVIVAL IN EMMA DONOGHUE'S *ROOM*: A PSYCHOLOGICAL APPROACH

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# Shadows of the Mind in Udayan Mukherjee's *Dark Circles* – A Psychoanalytic Study

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# Resilience in Paul Kalanithi's *When Breath Becomes Air:* An Analysis of Trauma

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# Saikat Majumdar's *The Firebird:* A Feminist Reading

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# JaishreeMisra's *Secrets and Lies*: A Postcolonial Feminist Reading

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# Power versus Powerless : A Subaltern Study of Vetrimaran's *Asuran*

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# INDIVIDUAL PSYCHOLOGY IN RACHAEL LIPPINCOTT'S FIVE FEET APART .

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# Alain Mabanckou's *Black Moses*: A Marxist Study

Dissertation submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# Hybridity in Mat Johnson's *Loving Day*: A Postcolonial Approach

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of

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# Niharika Jindal's *Wake up, girl!* : A Feminist Reading

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# *THE MEENAKSHI AMMAN TEMPLE AS A CULTURAL IDENTITY OF MADURAI - A STUDY*

Dissertation submitted to the Research Department of English, The American College in partial fulfillment of the requirements for the award of the Degree of **Master of Arts in English**

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**Declaration by the Candidate**

# Garima Pradhan's *A Girl That Had to Be Strong:* A Socialist Feminist Study

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# JOHN GREEN'S THE FAULT IN OUR STARS: A PSYCHOANALYTIC STUDY

Dissertation submitted to Research Department of English, The American College in partial fulfillment of the requirements for the award of the Degree of **Master of Arts** in **English**




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# Guilt and Mental Instability of Hannah Baker in *Thirteen Reasons Why*

Project submitted to the Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# Convultion of Personality in Ottessa Moshfegh's *Eileen*: A Psychoanalytic Study

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# The Politics of Space and Place in Kiran Desai's The Inheritance of Loss

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts in English.**

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# Id Vs Superego in Anna Burn's *Milkman*

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# Preeti Shenoy's *The Rule Breakers:* A Feminist Reading

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

by

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# Ghalib Shiraz Dhalla's *The Exiles*: A New Historicist Reading

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# THE ORCHARD OF LOST SOULS: A FEMINIST STUDY

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# Rachel Kushner's *The Mars Room:* A Postcolonial Feminist Study

Dissertation submitted to the Research Department of English,

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# Alex Michaelide's The Silent Patient: A Psychoanalytical study

Dissertation submitted to the Research Department of English (SF), The American College in partial fulfilment of the requirements for the award of the Degree of
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# Vicissitudes In Marritel Life: A Feministic Study

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# A Deconstructive Reading of William Paul Young's *The Shack*

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**


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# Paradox of Modernity in Ajay Navaria's *Unclaimed Terrain*

Dissertation submitted to Research Department of English, The American College in partial fulfilment of the requirements for the award of the Degree of
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# Chimamanda Ngozi Adichie's *Americanah*: An Ethnocentric Study

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# Loss of American Dream in Imbolo Mbue's *Behold the Dreamers:* A Diasporic Study

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# Cross-Cultural Invasion in Madurai – A Study

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# Bullfight as a Cultural Identity of Madurai –A Study

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# A Marxist Reading: Neel Mukherjee's *A State of Freedom*

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# A Psychoanalytical study of Jhumpa Lahiri's *The Lowland*

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# Rationalising the twisted minds: Behavioral Analysis of the Psychopath in *Rattle*

Project submitted to Postgraduate Department of English (SF), The American College in partial fulfilment of the requirements for the award of the Degree of **Master of Arts** in **English**

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# *A Postcolonial Reading on Select Poems of Meena Kandasamy*

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# A Subaltern Study of Assaf Gavron's *Almost Dead: A Novel*

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# A STUDY ON BIMAGIC LABELING

A Project work submitted to

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in partial fulfillment of the requirement

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# A STUDY ON BIMAGIC LABELING

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# A STUDY ON $\alpha_1$ AND $\alpha_2$ NEAR-RINGS

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

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# PELL'S EQUATION AND ITS APPLICATIONS

**A Project work submitted to The American College (Autonomous)**

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# FUZZY TRANSLATION AND FUZZY MULTIPLICATION ON PS – ALGEBRAS

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

**Master of Science**
**in**

**Mathematics**

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**DEPARTMENT OF MATHEMATICS**
**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**
**MADURAI – 625 002 . ( APRIL – 2020).**

# A STUDY ON THE DUAL NEIGHBORHOOD NUMBER

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai kamaraj University**

In partial fulfilment of the requirement for the Degree of

**Master of Science**

**in**

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**DAPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**

**MADURAI 625-002.**

**APRIL-2020.**

# COMMUTATIVITY OF RINGS AND NEAR – RINGS

*A Project work submitted to The American College (Autonomous)*

*Affiliated to Madurai Kamaraj University*

*In partial fulfilment of the requirement for the Degree of*

***Master of Science***

*in*

***Mathematics***

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***DEPARTMENT OF MATHEMATICS***

***THE AMERICAN COLLEGE (AUTONOMOUS)***

***(Re – Accredited with "A" Grade by NAAC)***

***MADURAI – 625 002***


***APRIL 2020***

# A STUDY ON "B-ALGEBRAS"

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

**Master of Science**

**in**

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**DEPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**

**MADURAI – 625 002**

**APRIL – 2020**

# A STUDY ON PERFECT NUMBERS AND NEAR PERFECT NUMBERS

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

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**(Re-Accredited with "A" Grade by NAAC)**

**MADURAI – 625 002**


**APRIL – 2020**

# DOM-CHROMATIC SETS IN GRAPHS

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

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**THE AMERICAN COLLEGE (AUTONOMOUS)**

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**MADURAI – 625 002**


**APRIL -2020**

# A STUDY ON BROADCAST ON PATHS AND CYCLES

**A project submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

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**Master of Science**

**In**

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**(Re-Accredited with "A" Grade by NAAC)**

**Madurai – 625 002**

**April 2020**

# STUDY ON NEIGHBOURHOOD TOTAL DOMINATION IN GRAPHS

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

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**MADURAI – 625 002**

**APRIL – 2020**

# FAREY SEQUENCE

**A Project work submitted to The American College (Autonomous) Affiliated to Madurai Kamaraj University**
In partial fulfilment of the requirement for the Degree of
**Master of Science**

**In**

**Mathematics**

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SINCE 1881

**DEPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE**

**(AUTONOMOUS)**

**(Re-Accredited with "A"Grade by NAAC)**

**MADURAI – 625 002**

**APRIL – 2020**

# STUDIES IN GRAPH THEORY WITH SPECIAL REFERENCE TO SUPER DOMINATION

A PROJECT WORK SUBMITTED TO THE AMERICAN COLLEGE (AUTONOMOUS) IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN **MATHEMATICS**

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**T. MADHUMITHA**

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**DEPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE (AUTONOMOUS)**
**(Re-Accredited with "A" Grade by NAAC)**
**MADURAI - 625 002**
**TAMILNADU**
**INDIA**

APRIL 2020

# FRACTALS FOR ITERATED FUNCTION SYSTEM

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

**Master of Science**
**in**
**Mathematics**
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**DEPARTMENT OF MATHEMATICS**
**THE AMERICAN COLLEGE (AUTONOMOUS)**
**(Re-Accredited with "A" Grade by NAAC)**
**MADURAI – 625 002**

**APRIL – 2020**

# A STUDY ON DEGREE EQUITABLE SETS IN GRAPHS

A PROJECT WORK SUBMITTED TO THE AMERICAN COLLEGE
(AUTONOMOUS)
IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE OF
**MASTER OF SCIENCE**
IN
**MATHEMATICS**

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**DEPARTMENT OF MATHEMATICS**
**THE AMERICAN COLLEGE (AUTONOMOUS)**
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**MADURAI - 625 002**
**TAMILNADU**
**INDIA**

APRIL - 2020

# A STUDY ON DIRECTABLE FUZZY AUTOMATA

**A Project work submitted to The American College (Autonomous) Affiliated to Madurai Kamaraj University**

In partial fulfillment of the requirement for the Degree of

**Master of Science**

**In**

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**DEPARTMENT OF MATHEMATICS THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**

**MADURAI – 625 002**

**APRIL – 2020**

# A STUDY ON SPECTRAL GRAPH THEORY

**A Project work submitted to The American College (Autonomous)**
**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

**Master of Science**

**in**

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**DEPARTMENT OF MATHEMATICS**

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**MADURAI – 625 002**


**APRIL – 2020**

# DIMENSION REDUCTION AND DECISION MAKING BY FUZZY SOFT SET THEORY AND FUZZY SOFT GRAPH THEORY

A Project work submitted to The American College (Autonomous)

Affiliated to Madurai Kamaraj University

In partial fulfilment of the requirement for the Degree of

**Master of Science**

**in**

**Mathematics**

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**DEPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

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**MADURAI – 625 002**

**APRIL 2020**

# NEW TYPE OF GENERALIZED OPEN SETS IN TOPOLOGICAL SPACES

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

**Master of Science**
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**DEPARTMENT OF MATHEMATICS**
**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**
**MADURAI – 625 002**


**APRIL – 2020**

# FIXED POINT THEOREMS ON WEAK CONTRACTIONS

**A Project work submitted to The American College (Autonomous) Affiliated to Madurai Kamaraj University**

In partial fulfillment of the requirement for the Degree of

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**THE AMERICAN COLLEGE (AUTONOMOUS)**

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**MADURAI – 625 002**

**APRIL – 2020**

# ANALYZING GRAPHS BY DEGREES

A Project work submitted to The American College (Autonomous)

Affiliated to Madurai Kamaraj University

In partial fulfillment of the requirement for the Degree of

**Master of Science**

**in**

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**MADURAI – 625 002**


**APRIL – 2020**

# NEIGHBOURHOOD CONNECTED DOMINATION IN GRAPHS

A PROJECT WORK SUBMITTED TO THE AMERICAN COLLEGE

(AUTONOMOUS)

IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE OF

MASTER OF SCIENCE

IN

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**DEPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

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**MADURAI- 625 002**

**TAMILNADU**

**INDIA**

**APRIL 2020**

# STAR CHROMATIC NUMBER OF SOME CLASSES OF GRAPHS

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

**Master of Science**

**in**

**Mathematics**

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**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**

**MADURAI – 625 002**

**APRIL – 2020**

# ON NANO STRONG CONTINUITY FORM

**A Project work submitted to The American College (Autonomous)**




**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of
**Master of Science In Mathematics**

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# A GRACEFUL LABELING

A PROJECT WORK SUBMITTED TO THE AMERICAN COLLEGE (AUTONOMOUS) IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN MATHEMATICS

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DEPARTMENT OF MATHEMATICS

THE AMERICAN COLLEGE (AUTONOMOUS)

(Re-Accredited with "A" Grade by NAAC)

MADURAI - 625 002

TAMILNADU

INDIA

APRIL 2020

# A STUDY ON NASH EQUILIBRIUM

**A Project work submitted to The American College (Autonomous)**
**Affiliated to Madurai Kamaraj University**

In partial fulfilment of the requirement for the Degree of

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**DEPARTMENT OF MATHEMATICS**
**THE AMERICAN COLLEGE (AUTONOMOUS)**

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**MADURAI – 625 002**


**APRIL – 2020**

# A STUDY ON MATROID THEORY

**A Project work submitted to The American College (Autonomous)**
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In partial fulfilment of the requirement for the Degree of

**Master of Science**

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**DEPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re–Accredited with "A" Grade by NAAC)**

**MADURAI – 625 002**


**APRIL – 2020**

# A STUDY ON ENERGY OF A GRAPH

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

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**DEPARTMENT OF MATHEMATICS**

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**MADURAI – 625 002**


**APRIL – 2020**

# GENERALIZATION AND PROPERTIES OF THE TERNARY CANTOR SET

A project submitted to The American College (Autonomous)

Affiliated to Madurai Kamaraj University

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Madurai – 625 002

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# A STUDY ON MEAN GRAPHS

**A Project work submitted to The American College (Autonomous)**

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In partial fulfilment of the requirement for the Degree of

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**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**

**MADURAI - 625 002, APRIL – 2020**

# HAMILTONIAN PATHS IN SOME CLASSES OF ALPHABET $(C, E, F, L)$ GRID GRAPHS

A Project work submitted to The American College (Autonomous)

Affiliated to Madurai Kamaraj University

In partial fulfilment of the requirement for the Degree of

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**in**

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**DEPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**

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**APRIL – 2020**

# DUAL CONNECTED NEIGHBORHOOD DOMINATION IN GRAPHS

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

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(Re-Accredited with "A" Grade by NAAC)

MADURAI – 625 002

APRIL – 2020

# RIEMANN ZETA FUNCTION

**A Project work submitted to The American College (Autonomous)**

**Affiliated to Madurai Kamaraj University**

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**in**

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**DEPARTMENT OF MATHEMATICS**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re-Accredited with "A" Grade by NAAC)**

**MADURAI – 625 002**


**APRIL – 2020**

# CERTIFICATE

This is to certify that the project report entitle A Study on Part-Time Working UG Students in The American College. **K. ABUBUCKER SIDDIK(17RPS01)** under our supervision and guidance.

08/04/2019

Head of the Department

Rev .Dr. Arul Arasu Israel,
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P. M.

Project Guide

Dr. P. M. Anurama,
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9.4.2019

EXTERNAL EXAMINER

# DECLARATION

I hereby declare that the project on "**A Study on Part-Time Working UG Students in The American College**" was done by me and I submit the project report as a partial fulfillment for the course **RPS 2536, Project in Sociology.**

K. Abubucker Siddik

**K. ABUBUCKER SIDDIK**

**17RPS01**

# CERTIFICATE

This is to certify that the project report entitle "A STUDY ON WOMEN CONSTRUCTION WORKERS IN MADURAI CITY " was done by P. SATHISH KUMAR (17RPS39) under our supervision and guidance.

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9.4.2019

EXTERNAL EXAMINER

# A STUDY ON WOMEN CONSTRUCTION WORKERS IN MADURAI CITY

Project report submitted to Department of Religion Philosophy and Sociology BA. (RPS) The American College, Madurai-02.

For this course,

RPS 2536-PROJECT IN SOCIOLOGY

Submitted By

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Since 1881

The American College, Madurai.

(An Autonomous Institution Affiliated to Madurai Kamaraj University) Re-accredited (2 Cycle) by NAAC with Grade "A", CGPA-3.46 on a 4-point scale.

# A STUDY ON FARMERS TURNED LABOURERS IN MANNADIMANGALAM

Project report submitted to Department of Religion Philosophy and Sociology BA. (RPS) The American College, Madurai-02.

For this course,

RPS 2536-PROJECT IN SOCIOLOGY

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9.4.2019

EXTERNAL EXAMINER

# CERTIFICATE

This is to certify that the project report entitle ~~A Study on Madurai PRC Drivers~~ "To Study about The Problems faced by Bus Drivers in Madurai" **A.MOHAMED FAZIL (17RPS24)** under our supervision and guidance.

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9.4.2019.

EXTERNAL EXAMINER



2020/7/14 09:39

# TO STUDY ABOUT THE PROBLEMS OF ~~PRC~~ BUS DRIVERS IN MADURAI

Project report submitted to Department of Religion Philosophy and Sociology BA. (RPS) The American College, Madurai-02.

For this course,

RPS 2536-PROJECT IN SOCIOLOGY


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Since 1881


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# CERTIFICATE

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EXTERNAL EXAMINER

# A STUDY ON PUBG ADDICTION AMONG THE AMERICAN COLLEGE STUDENTS, MADURAI

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**SINCE 1881**

The American College, Madurai.

(An Autonomous Institution Affiliated to Madurai Kamaraj University) Re-accredited (2 Cycle) by NAAC with Grade "A", CGPA-3.46 on a 4-point scale.

# CERTIFICATE

This is to certify that the project report entitled, **A STUDY ON CONSUMPTION AND AWARENESS OF FAST FOOD AMONG AMERICAN COLLEGE STUDENTS** was done by **E.Hadley Solomon (17RPS11)** under our supervision and guidance.

08/04/2019

Head of the Department

Rev. Dr. Arul Arasu Israel,
Department of RPS,
The American College,
Madurai.

P.M. Anu

Project Guide

Dr. P.M.Anurama,
Department of RPS
Assistant Professor,
The American college,
Madurai.

9.4.2019

EXTERNAL EXAMINER

# A STUDY ON CONSUMPTION AND AWARENESS OF FAST FOOD AMONG AMERICAN COLLEGE STUDENTS

Project report submitted to Department of Religion Philosophy and Sociology BA. (RPS) The American College, Madurai-02.

For this course,

**RPS 2536-PROJECT IN SOCIOLOGY**

Submitted By.

**E. Hadley Solomon 17RPS11**

**Since 1881**

The American College, Madurai.

(An Autonomous Institution Affiliated to Madurai Kamaraj University)
Re-accredited (2 Cycle) by NAAC with Grade "A", CGPA-3.46 on a 4-point scale.

## CERTIFICATE

This is to certify that the project report entitled, '**A Study on Problems of Lorry Drivers in Sakkimangalam Village**', was done by **a .Martin Abraham (17RPS23)** under our supervision and guidance.

08/04/2019

**Head of the Department**
Rev .Dr. Arul Arasu Israel,
Department of RPS
The American College Madurai

P. M. Anu.

**Project Guide**
Dr. P .M .Anurama,
Assistant Professor
Department of RPS
The American College
Madurai

9.4.2019.

**EXTERNAL EXAMINER**

# A STUDY ON PROBLEMS OF LORRY DRIVERS IN SAKKIMANGALAM VILLAGE

Project report submitted to Department of Religion Philosophy and Sociology BA. (RPS) The American College, Madurai-02.

For this course,

**RPS 2536 - PROJECT IN SOCIOLOGY**

Submitted By

**A.Martinabraham-17RPS23**

**Since 1881**

The American College, Madurai.

(An Autonomous Institution Affiliated to Madurai Kamaraj University) Re-accredited (2 Cycle) by NAAC with Grade "A", CGPA-3.46 on a 4-point scale

# CERTIFICATE

This is to certify that the project report entitled"A Study on Mothers of Mentally Challenged Children in Madurai". **N.VISHNU KUMAR (17RPS49)** under our supervision and guidance.

Head of the Department

Rev. Dr. Arul Arasu Israel,
Department of RPS
The American College
Madurai.

Project Guide

Dr. P.M. Anurama,
Assistant Professor
Department of RPS
The American college
Madurai.

EXTERNAL EXAMINER

Study on

# PROBLEMS FACED BY MOTHERS OF MENTALLY CHALLENGED CHILDREN IN MADURAI CITY

Project report submitted to Department of Religion Philosophy and Sociology BA. (RPS) The American College, Madurai-02.

For this course,

**RPS 2536-PROJECT IN SOCIOLOGY**

Submitted By

**N. VISHNU KUMAR 17RPS49**

**Since 1881**

The American College, Madurai.

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2 Cycle) by NAAC with Grade "A", CGPA-3.46 on a 4-point scale.

# CERTIFICATE

This is to certify that the project report entitled "**A study of inmates of peace deaddiction centre in alagarkovil**" was done by Bharath Kumar, 17RPS07, under our supervision and guidance.

08/04/2019

Head of the Department

Rev .Dr. Arul Arasu Israel,
Department of RPS
The American College
Madurai.

P.M. Anu

Project Guide

Dr. P.M. Anu Rama,
Assistant Professor
Department of RPS
The American colleg
Madurai.

B. Bharath 9-4-2019.

EXTERNAL EXAMINER

# A STUDY OF INMATES OF PEACE DEADDICTION CENTRE IN ALAGARKOVIL

Project report submitted to Department of Religion Philosophy and Sociology BA.

(RPS) The American College, Madurai-02.

For this course,

**RPS 2536-PROJECT IN SOCIOLOGY**

Submitted By

**R.J. BARATH KUMAR 17RPS07**

**Since 1881**

The American College, Madurai.

(An Autonomous Institution Affiliated to Madurai Kamara University)

Re-accredited (2 Cycle) by NAAC with Grade "A", CGPA-3.46 on a 4-point scale.

# CERTIFICATE

This is to certify that the project report entitle "A STUDY ON HOTEL WORKERS PROBLEM IN MADURAI". **R.SIVA KUMAR (17RPS65)** under our supervision and guidance.

05/04/2019

Head of the Department

Rev .Dr. Arul Arasu Israel,
Department of RPS
The American College
Madurai.

P.M. Anu

Project Guide

Dr. P.M.Anurama
Assistant Professor
Department of RPS
The American college
Madurai.

9.4.2019.

EXTERNAL EXAMINER

# CERTIFICATE

This is to certify that the project report entitle A Study on Mobile phone usage Among the students of The American college D.MANI SHANKAR (17RPS22) under our supervision and guidance.

09/04/2019

Head of the Department

Rev .Dr. Arul Arasu Israel,
Department of RPS
The American College
Madurai.

P. M. Anu

Project Guide

Dr. P.M. ANU RAMA,
Assistant Professor
Department of RPS
The American college
Madurai.

9.4.2019.

EXTERNAL EXAMINER

# Government Stanley Medical College & Hospital

Chennai - 600001.

## Department of Psychiatry

## Certificate

This To Certify That Mr. / ~~Miss.~~ / ~~Mrs.~~ S. Akash

Has Completed the Internship in Psychiatry as a part of

1st year MSW from American College, Madurai

from 2.05.2018 to 25.5.2018.

24/5/18

Prof. & HOD
Dept. of Psychiatry

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HelpAge India | Fighting isolation, poverty, neglect

**State Office :** 3C, Thiyagaraja Complex, No.853, Poonamallee High Road, Kilpauk, Chennai 600 010. Ph: 044-25322149, Email: Chennai@helpageindia.org, Website: www.helpageindia.org

**GOVERNING BODY**
Mr. Kiran Karnik
*Chairperson*

Ms. Rumjhum Chatterjee
*Vice Chairperson*

Mrs. Shanta Chatterji
*Treasurer*

Mr. K. S. B Sanyal

Mr. J. C. Luther

Mr. Arun Seth

Mr. Pramod Bhasin

Dr. (Mrs.) Asha Padgaonkar

Mr. K.T. Chacko

Mr. Arun Nanda

Mr. Mathew Cherian
*Chief Executive Officer*

**13th September 2019**

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that **K ABIRAMI (18-MSW-01),** Second Year Student of M.S.W at The American College, Madurai had completed her block placement in HelpAge India – Chennai during the period August 13, 2019 till September 13, 2019 (All Working days).

During her tenure with us, her conduct and behaviour had been Excellent and she was involved in the activities concurring our Mobile Medicare Unit, Elders Helpline, Old Age Homes and Advocacy Programs.

I wish her all success for her future endeavours.

**V. Sivakumar**
State Head – Tamil Nadu

HelpAge India
No.3C,
Thiyagaraja Complex,
853, P.H. Road,
Kilpauk, Chennai-10.
Territory Office

k Abirami
18MSW01

Department of Social Work,
The American College, Madurai.

Evaluation Form

*ASSESSMENT OF STUDENT PERFORMANCE IN FIELDWORK PLACEMENT* – MSW 5458
Block Placement for Development Management Social Work II – Field Work.

*FIELDWORK AGENCY VERSION*

| Evaluation Criteria | Marks | Marks Allotted By Organization/Agency/Institution |
|---|---|---|
| Maintaining Field work diary & General participation in agency related activity | 20 | 20 |
| Attendance in the agency<br>(Each day carriers 1 mark respectively ) | 30 | 30 |
| Requirements – Issues Related to Subject relevance , Subject Contextualization (Casework, Groupwork& Community Organisation Programme ) | 30 | 25 |
| Skills , competencies & written reports | 20 | 18 |
| Total | 100 | 93 |

Signature: B.M

B.MUTHURAMAN
Deputy Manager

Seal: AROGYA WELFARE TRUST
No 10 Jawahar Road
Chokkikulam
Madurai - 625 002

Name &Designation:

Date: 14/1/2020

## JOINING REPORT

Date: 28-01-19

From

J. Gladys
18MSW11
Department of Social Work
The American College

To

The Director,
Department of Social Work,
The American College,
Madurai-625 002.

Dear Sir,

**Subject: Joining Report Intimation – Reg.**

With reference to the permission granted by the organization, I J. GLADYS have taken up the **Preparatory Field Work (Block)** on 28-01-19 in the Computer Enterprises as per the directions given by the department for the course requirement **MSW 4510 Preparatory Field Work (Block)**

Thanking you.

J. Gladys

Yours Sincerely,

Endorsement from the organization

Name: VIJAY ANAND. N.S

Signature:

Official Seal: CEI INDIA PRIVATE LIMITED CHENNAI

# THE INDIA CEMENTS LIMITED

Corporate Office : Coromandel Towers, 93, Santhome High Road, Karpagam Avenue.
R.A. Puram, Chennai 600 028. Phone : 044 - 2852 1526, 2857 2100
Fax : 044 - 2852 1247 Grams : 'INDCEMENT'
CIN : L26942TN1946PLC000931


EST:

13th September 2019

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. K Subhasri (Reg No. 18MSW31),** a II year MSW student of The American College, Madurai has done her Internship in the HR Department of our Corporate Office at Chennai for a period of one month from 13th August 2019 to 13th September 2019.

During the above period, she has shown keen interest to learn and a sense of involvement in all areas of activities. Her conduct was found to be good.

We are sure that the study done by her in our Organisation will be of immense help in her career.

We wish her all the best in all her future endeavours.

**For THE INDIA CEMENTS LIMITED,**

**VICE-PRESIDENT (PERSONNEL)**

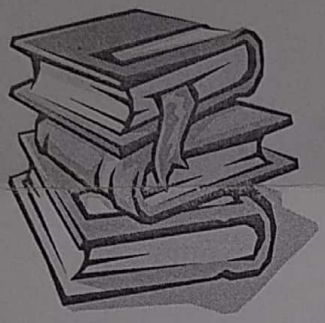


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**Orchid Pharma Ltd.**
(Formerly Known as Orchid Chemicals & Pharmaceuticals Limited)

Factory : 85-87, 98-100, 126-131, 138-151 &159-164, SIDCO Industrial Estate, Old Mahabalipuram Road (OMR), Alathur, Thiruporur - 603 110, kancheepuram District, Tamil Nadu, India
Tel : (91) -44-2744 4471 - 78, Fax: (91) - 44 - 2744 4479

September 13, 2019



## CERTIFICATE

This is to certify that **Ms.Priyanka S, MSW (HR),** II Year student from The American College, Madurai, underwent Internship at our API Business Unit - Alathur during the period **August 13, 2019 to September 13, 2019.**

During the above said tenure, we found her satisfactory to the job assigned to her by our Organization.

We wish her success in her career.

**For Orchid Pharma Ltd.**

Jayaraj M
Senior Executive-Human Resources

Registered & Corporate office :
Orchid Towers', # 313, Valluvarkottam High Road,
Nugambakkam, Chennai - 600 034, Tamilnadu, India

Tel : +91 - 44 - 2821 1000
Fax : +91 - 44 - 2821 1002
E-mail : Corporate@orchidpharma.com
Website : www.orchidpharma.com

CIN : L24222TN1992PLC022994

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Department of Social Work,

The American College, Madurai.

Evaluation Form

*ASSESSMENT OF STUDENT PERFORMANCE IN FIELDWORK PLACEMENT –* MSW 5478- Block Placement for Human Resource Management Social Work – Field Work.

*FIELDWORK AGENCY VERSION*

| Evaluation Criteria | Marks | Marks Allotted By Organization/Agency/Institution |
|---|---|---|
| Maintaining Field work diary & General participation in agency related activity | 20 | 18 |
| Attendance in the agency<br>(Each day carriers 1 mark respectively ) | 30 | 28 |
| Requirements – Issues Related to Subject relevance , Subject Contextualization (Casework, Groupwork& Community Organisation Programme ) | 30 | 28 |
| Skills , competencies & written reports | 20 | 18 |
| Total | 100 | 92 |

Signature:

Seal:

MANAGER - HR
Meenakshi Mission Hospital and Research Centre
Lake Area, Melur Road,
Madurai - 625 107.

Meenakshi Mission Hospital and Research Centre
Lake Area, Madurai-625 107
☎ 4263000

Name &Designation:

Date: 14/01/2020

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# 'ஆல்' நாவலில் இனவரைவியல் குறிப்புகள்

மதுரை அமெரிக்கன் கல்லூரி (தன்னாட்சியில் முதுகலைத் தமிழ்த் துறை) பட்ட மேற்படிப்புக்கு அளிக்கப்படும் ஆய்வேடு

ஆய்வாளர்


**ரு.அழகன் அமலம்**

பதிவு எண் : **18PGT02**


மேற்பார்வையாளர்


**முனைவர் ம. செங்கோல் மேரி**

உதவிப் பேராசிரியர்,

தமிழ் உயராய்வு மையம்,

அமெரிக்கன் கல்லூரி,

மதுரை -625002.



தமிழ் உயராய்வு மையம்

அமெரிக்கன் கல்லூரி

மதுரை -625002

**2020**

**பேரா ம. செங்கோல் மேரி**
உதவிப் பேராசிரியர்,
தமிழ் உயராய்வு மையம்,
அமெரிக்கன் கல்லூரி,
மதுரை – 625 002.

# மேற்பார்வையாளர் சான்றிதழ்

'சூல் நாவலில் இனவரைவியல் குறித்தான பதிவுகள்' என்னும் தலைப்பில், திரு க. அழகன் அம்பலம் அவர்கள் செய்துள்ள இவ்வாய்வு, மதுரை தியாகராசர் கல்லூரி, தமிழ் உயராய்வு மையத்தில் முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக, என் மேற்பார்வையின் கீழ், இவரே தம் சொந்த முயற்சியில் செய்தது என்றும், இவ்வாய்விற்காக இவருக்கு வேறு எந்தப் பட்டமும் அளிக்கப் பெறவில்லை என்றும் உறுதி கூறிச் சான்றளிக்கலாகிறது.

ம. செங்கோல் மேரி

முனை(பேரா. ம. செங்கோல் மேரி)
மேற்பார்வையாளர்

இடம் : மதுரை.
நாள் :

19.9.2020

**முனை.வ.ஜெ.சரோஜினி**, எம்.ஏ.,எம்.ஃபில்.,பி.எச்.டி.,
தமிழ்த்துறைத் தலைவர் (முதுகலை)
தமிழ் உயராய்வு மையம்
அமெரிக்கன் கல்லூரி, மதுரை-2.

# முக்கூடற்பள்ளும் - அழகர் கிள்ளை விடு தூதும் முன்மொழியும் வைணவ சமய வாதக் கருத்தாக்கம்

மதுரை அமெரிக்கன் கல்லூரி (தன்னாட்சி)யில் முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக அளிக்கப்படும் ஆய்வேடு


ஆய்வாளர்

**க. கார்த்திக்**

பதிவு எண் : **18PGT 05**

மேற்பார்வையாளர்

**முனைவர் ம.செங்கோல் மேரி**

உதவிப் பேராசிரியர்,

தமிழ் உயராய்வு மையம்,

அமெரிக்கன் கல்லூரி,

மதுரை – 625 002.



**தமிழ் உயராய்வு மையம்**

**அமெரிக்கன் கல்லூரி**

**மதுரை – 625002**

**2020**

முனைவர் ம.செங்கோல் மேரி

உதவிப் பேராசிரியர்,
தமிழ் உயராய்வு மையம்,
அமெரிக்கன் கல்லூரி,
மதுரை - 625 002.

# மேற்பார்வையாளர் சான்றிதழ்

முக்கூடற்பள்ளும் அழகர் கிள்ளை விடு தூதும் முன்மொழியும் வைணவ சமய வாதக் கருத்தாக்கம் என்னும் தலைப்பில், **க. கார்த்திக்** அவர்கள் செய்துள்ள இவ்வாய்வு, மதுரை அமெரிக்கன் கல்லூரி, தமிழ் உயராய்வு மையத்தில் முதுகலைத் தமிழ்ப்(எம்.ஏ.,) பட்டத்திற்காக, என் மேற்பார்வையின் கீழ், இவரே தம் சொந்த முயற்சியில் செய்தது என்றும், இவ்வாய்விற்காக இவருக்கு வேறு எந்தப் பட்டமும் அளிக்கப்பெறவில்லை என்றும் உறுதி கூறி சான்றளிக்கலாகிறது.

இடம் : மதுரை,
நாள் : 28.9.2020

(முனைவர் ம.செங்கோல் மேரி)
மேற்பார்வையாளர்

முனைவர்.ஜெ.சரோஜினி, எம்.ஏ.,எம்.பில்.,பி.எச்.டி.,
தமிழ்த்துறைத் தலைவர் (முதுகலை)
தமிழ் உயராய்வு மையம்
அமெரிக்கன் கல்லூரி, மதுரை-2.

# ‘சயாம் மரண ரயில்’ புதினம் காட்சிப்படுத்தும் புலம்பெயர் தமிழர்களின் வாழ்வியல் நசிவுகள்

மதுரை அமெரிக்கன் கல்லூரி (தன்னாட்சி)யில் முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக அளிக்கப்படும் ஆய்வேடு


ஆய்வாளர்

நா. மணிகண்டபிரபு

பதிவு எண் : 18PGT 07

மேற்பார்வையாளர்

முனைவர் ஆ. பூமிச்செல்வம்

உதவிப் பேராசிரியர்,

தமிழ் உயராய்வு மையம்,

அமெரிக்கன் கல்லூரி,

மதுரை - 625002.



தமிழ் உயராய்வு மையம்

அமெரிக்கன் கல்லூரி

மதுரை - 625002

2020

முனைவர் ஆ. பூமிச்செல்வம்,
எம்.ஏ.,(தமிழ்).,எம்.ஏ.,(கத்துவம்).,பி.எட்.,எம்.பில்.,பிஎச்.டி.,
உதவிப் பேராசிரியர்.
தமிழ் உயராய்வு மையம்,
அமெரிக்கன் கல்லூரி,
மதுரை – 625 002.

# மேற்பார்வையாளர் சான்றிதழ்

'சயாம் மரண ரயில்' புதினம் காட்சிப்படுத்தும் புலம்பெயர் தமிழர்களின் வாழ்வியல் நசிவுகள் என்னும் தலைப்பில், திரு நா. மணிகண்டபிரபு அவர்கள் செய்துள்ள இவ்வாய்வு, முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக, என் மேற்பார்வையின் கீழ், இவரே தம் சொந்த முயற்சியில் செய்தது என்றும், இவ்வாய்விற்காக இவருக்கு வேறு எந்தப் பட்டமும் அளிக்கப் பெறவில்லை என்றும் உறுதி கூறிச் சான்றளிக்கலாகிறது.

இடம் : மதுரை.

நாள் : 29.09.2020

(முனைவர் ஆ. பூமிச்செல்வம்)

மேற்பார்வையாளர்
முனைவர் ஆ. பூமிச்செல்வம்
எம்.ஏ., பி.எட்., எம்.பில்., பி.எச்.டி.,
உதவிப் பேராசிரியர்,
தமிழ் உயராய்வு மையம்,
அமெரிக்கன் கல்லூரி, மதுரை-625002.

# தொல்காப்பியம் மற்றும் சிலப்பதிகாரத்தில் நடுகல் குறித்தான பதிவுகள்

மதுரை அமெரிக்கன் கல்லூரி (தன்னாட்சி)யில் முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக அளிக்கப்படும் ஆய்வேடு

ஆய்வாளர்

**ம. விவேக் (எ) நாச்சான்**

பதிவு எண் : **18PGT15**

மேற்பார்வையாளர்

**முனைவர் ஜோ. பிரின்ஸ்**

உதவிப் பேராசிரியர்,

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தமிழ் உயராய்வு மையம்

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**2020**

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தமிழ் உயராய்வு மையம்,
அமெரிக்கன் கல்லூரி,
மதுரை – 625 002.

# மேற்பார்வையாளர் சான்றிதழ்

**'தொல்காப்பியம் மற்றும் சிலப்பதிகாரத்தில் நடுகல் குறித்த பதிவுகள்'** என்னும் தலைப்பில், **திரு ம. விவேக் (எ) நாச்சான்** அவர்கள் செய்துள்ள இவ்வாய்வு, முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக, என் மேற்பார்வையின் கீழ், இவரே தம் சொந்த முயற்சியில் செய்தது என்றும், இவ்வாய்விற்காக இவருக்கு வேறு எந்தப் பட்டமும் அளிக்கப் பெறவில்லை என்றும் உறுதி கூறிச் சான்றளிக்கலாகிறது.

(முனைவர் ஜோ. பிரின்ஸ்)
மேற்பார்வையாளர்

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இடம் : மதுரை.
நாள் : 21.9.2020

19.9.2020
முனைவர்.செ.சரோஜினி, எம்.ஏ.,எம்.பில்.,பி.எச்.டி.,
தமிழ்த்துறைத் தலைவர் (முதுகலை)
தமிழ் உயராய்வு மையம்
அமெரிக்கன் கல்லூரி, மதுரை-2.

# ‘ஏறுதழுவுதல்’ அன்றும் இன்றும் ஓர் ஆய்வு

மதுரை அமெரிக்கன் கல்லூரி (தன்னாட்சி)யில் முதுகலைத் தமிழ்ப் (எம்.ஏ.,)

பட்டத்திற்காக அளிக்கப்படும் ஆய்வேடு


ஆய்வாளர்

**இரா. பெரியகருப்பன்**

பதிவு எண் : **18PGT 09**

மேற்பார்வையாளர்

**முனைவர் மா. மீனாட்சி சுந்தரம்**

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தமிழ் உயராய்வு மையம்,

அமெரிக்கன் கல்லூரி,

மதுரை – 625 002.



**தமிழ் உயராய்வு மையம்**

**அமெரிக்கன் கல்லூரி**

**மதுரை – 625002**

**2020**

**பேரா ம. மீனாட்சிசுந்தரம்**
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தமிழ் உயராய்வு மையம்,
அமெரிக்கன் கல்லூரி,
மதுரை – 625 002.

# மேற்பார்வையாளர் சான்றிதழ்

**'ஏறுதழுவுதல் அன்றும் இன்றும் - ஓர் ஆய்வு'** என்னும் தலைப்பில், **திரு இரா. பெரிய கருப்பன்** அவர்கள் செய்துள்ள இவ்வாய்வு, முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக, என் மேற்பார்வையின் கீழ், இவரே தம் சொந்த முயற்சியில் செய்தது என்றும், இவ்வாய்விற்காக இவருக்கு வேறு எந்தப் பட்டமும் அளிக்கப் பெறவில்லை என்றும் உறுதி கூறிச் சான்றளிக்கலாகிறது.

இடம் : மதுரை,
நாள் :

(பேரா ம. மீனாட்சிசுந்தரம்)
மேற்பார்வையாளர்

19.9.2024

முனைவர்.செ.சரோஜினி, எம்.ஏ.,எம்.பில்.,பி.எச்.டி.,
தமிழ்த்துறைத் தலைவர் (முதுகலை)
தமிழ் உயராய்வு மையம்
அமெரிக்கன் கல்லூரி, மதுரை-2.

# பெண்மையவாத அணுகுமுறையில் கு.விக்ரம் கருப்புச் ச(ர)ட்டை

மதுரை அமெரிக்கன் கல்லூரி ( தன்னாட்சி) யில் முதுகலைத்

தமிழ் (எம்.ஏ) பட்டத்திற்காக அளிக்கப்படும் ஆய்வேடு


ஆய்வாளர்

ம.இரா.சரத் யாதவ்

பதிவு எண். 18PGT17

மேற்பார்வையாளர்

உதவிப்பேராசிரியர் : மா. மீனாட்சிசுந்தரம்






தமிழ்த் துறை

அமெரிக்கன் கல்லூரி

மதுரை - 625 002.



2020

**பேரா ம. மீனாட்சிசுந்தரம்**
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தமிழ் உயராய்வு மையம்,
அமெரிக்கன் கல்லூரி,
மதுரை – 625 002.

# மேற்பார்வையாளர் சான்றிதழ்

**'பெண்மையவாத அணுகுமுறையில் கு.விக்ரம் கருப்புச் ச(ா)ட்டை'** என்னும் தலைப்பில், **திரு ம.இரா. சரத் யாதவ்** அவர்கள் செய்துள்ள இவ்வாய்வு, முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக, என் மேற்பார்வையின் கீழ், இவரே தம் சொந்த முயற்சியில் செய்தது என்றும், இவ்வாய்விற்காக இவருக்கு வேறு எந்தப் பட்டமும் அளிக்கப் பெறவில்லை என்றும் உறுதி கூறிச் சான்றளிக்கலாகிறது.

**(பேரா ம. மீனாட்சிசுந்தரம்)**
மேற்பார்வையாளர்

இடம் : மதுரை.
நாள் :

19.9.2020

முனை.இ.சரோஜா, எம்.ஏ.,எம்.பில்.,பி.எட்.,
தமிழ்த்துறைத் தலைவர் (முதுகலை)
தமிழ் உயராய்வு மையம்
அமெரிக்கன் கல்லூரி. மதுரை-2.

# கடவுச்சீட்டு புதினத்தில் புலம்பெயர் மக்களின் பன்முகப் பிரச்சினைகள்

மதுரை அமெரிக்கன் கல்லூரி (தன்னாட்சி)யில் முதுகலைத் தமிழ்ப் (எம்.ஏ..) பட்டத்திற்காக அளிக்கப்படும் ஆய்வேடு


ஆய்வாளர்

**மு. பாக்கியலெட்சுமி**

பதிவு எண் : **18PGT 18**

மேற்பார்வையாளர்

**முனைவர் ஜெ.சா. ஜிஜி கிறிஸ்டோபெல்**

உதவிப் பேராசிரியர்,

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அமெரிக்கன் கல்லூரி,

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தமிழ் உயராய்வு மையம்

அமெரிக்கன் கல்லூரி

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முனைவர் ஜெ.சா. ஜிஜி கிறிஸ்டோபெல்,
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தமிழ் உயராய்வு மையம்,
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# மேற்பார்வையாளர் சான்றிதழ்

கடவுச்சீட்டு புதினத்தில் புலம்பெயர் மக்களின் பன்முகப் பிரச்சினைகள் என்னும் தலைப்பில் மு. பாக்கியலெட்சுமி அவர்கள் செய்துள்ள இவ்வாய்வு, முதுகலைத் தமிழ்ப் (எம்.ஏ.,) பட்டத்திற்காக, என் மேற்பார்வையின் கீழ், இவரே தம் சொந்த முயற்சியில் செய்தது என்றும், இவ்வாய்விற்காக இவருக்கு வேறு எந்தப் பட்டமும் அளிக்கப் பெறவில்லை என்றும் உறுதி கூறிச் சான்றளிக்கலாகிறது.

ஜெ.சா.ஜிஜி

இடம் : மதுரை, (முனைவர் ஜெ.சா. ஜிஜி கிறிஸ்டோபெல்)

நாள் : மேற்பார்வையாளர்

14.10.2020
முனை.ஜெ.சரோஜினி, எம்.ஏ.,எம்.ஃபில்.,பி.எச்.டி.,
தமிழ்த்துறைத் தலைவர் (முதுகலை)
தமிழ் உயராய்வு மையம்
அமெரிக்கன் கல்லூரி, மதுரை-2.

# AVIAN DIVERSITY IN THE OUTSKIRTS OF SIVAKASI, VIRUDHUNAGAR DISTRICT (2019-2020)

A Dissertation submitted to The American College affiliated to Madurai Kamaraj University in partial fulfillment of the requirement for the degree of

**Master of Science in Zoology**


## A.PRIYADARSHINI

## 18PGZ15

**POSTGRADUATE & RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE (Autonomous)**

**Re-Accredited (2nd cycle) by NAAC with Grade 'A' CGPA -3.46 on a 4 point scale**

**MADURAI – 625002**


**April 2020**

# CERTIFICATE

This is to certify that this dissertation entitled "**Avian diversity in the outskirts of Sivakasi, Virudhunagar district, Tamil nadu, India"** submitted by **Ms. A. Priyadarshini (18PGZ15)** in a partial fulfillment for the degree of Master of Science in Zoology has been carried out by her during the year 2019-2020 in the Post Graduate & Research Department of Zoology, The American college, Madurai. This dissertation has not been submitted elsewhere for any other degree.


**Dr.A.Joseph Thateyus**
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**Mr.M.Rajesh**
Assistant Professor
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Madurai

# DECLARATION

I hereby declare that the thesis entitled **"Avian diversity in the outskirts of Sivakasi, Virudhunagar district, Tamil Nadu, India"** submitted by me for the degree of **Master of Science in Zoology** is the result of my original and independent research work carried out by me under the guidance of **Mr. M. Rajesh**, Assistant Professor, PG & Research Department of Zoology, The American College, Madurai-2 and it has not been submitted for the award of any degree/ diploma/ fellowship of any University or Institution.

Place: Madurai Ms. A. Priyadarshini

Date:

# ACKNOWLEDGEMENT

I wish to thank the **God** almighty for his grace upon me and his blessings which has made me to complete my project.

I want to express my sincere gratitude to **DR.M.DAVAMANI CHRISTOBER**, Principal, The American College, Madurai for his allowance on my project.

I owe my deepest gratitude to my parents, **J.ARAVINDAN PRAKASH-A.KAVITHA**. I am grateful to them, whose foresight, encouragement and support paved the way for a privileged education.

I express my heartfelt gratitude to **Dr.A.JOSEPH THATHEYUS**, Head of the department, PG & Research Department of Zoology.

I am extremely grateful and thankful to **Prof. M.RAJESH**, my guide for supporting this topic, his invaluable guidance, keen academic interest, his motivation and constant encouragement throughout this project.

My heartfelt thanks to my dear **FRIENDS**, who made my surrounding a convivial place to work. Their support in this effort is, however, greatly appreciated for completion of my project to great success.

I would like to thank my **loved ones**, who have supported me throughout the entire process, both by keeping me harmonious and helping me putting peace together.

I owe everything to them. Besides this, several people have knowingly and unknowingly assisted me in the successful completion of my project.

# STUDY ON THE ECO-ETHOLOGY OF BUTTERFLIES IN THE BUTTERFLY GARDEN. THE AMERICAN COLLEGE

Dissertation submitted to The American College, Madurai in partial fulfillment for award of the Degree of Master of Science Zoology

K. ABIRAMI

(18PGZ01)

SINCE 1881

POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY

THE AMERICAN COLLEGE

(Re-Accredited with ` A 'Grade by NAAC)

MADURAI -625002

April 2020

***

# DECLARATION

I hereby declare that this dissertation entitled "**Study on the Eco-Ethology of Butterflies in the Butterfly Garden. The American College- Madurai**" has been carried out by **Dr. E. Joy Sharmila,** Head Of the Department, Assistant professor, U.G Department Of Zoology me under the guidance of and this work has not been submitted elsewhere for the award of any other degree.

Madurai

April 2020 Signature of candidate

# CERTIFICATE

This is to certify that this dissertation entitled ``**Study on the Eco-Ethology of Butterflies in the Butterfly garden. The American College Madurai,"** submitted by K.ABIRAMI (18PGZ01) as a partial fulfillment for the degree of Master of Science in Zoology is based on the results of the project carried out by her under my guidance and supervision in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002.


**Dr. A. Joseph Thatheyus**

Head of the Department

Associated professor

PG & Research Department of Zoology

The American College

Madurai-625002

**Dr. E. Joy Sharmila**

Head of the Department

Assistant professor

U.G Department of Zoology

The American College

Madurai-625002

# ACKNOWLEDGEMENT

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# INTRODUCTION

Butterflies are referred as ‘’insects of the sun’’ with their eye catching color and delicate charisma. They have been admired for centuries for their physical beauty and behavioral display (Arya *et al.*, 2014). Out of about 25,000 species of butterflies recorded from all over the world, 1501 are from India (Gay *et al.,* 1992). Butterflies are cold blooded invertebrates are easily affected by changes in climate and like most animals their distribution too is greatly affected by these changes (Kehimar, 2008). Butterflies are diurnal insects which typically have a slender body with knobbed antennae and broad colorful wings. They differ from moths which are crepuscular or nocturnal insects having a stout body and feathery or hair like antennae. They play a pivotal role in determining the stability of an ecosystem since their numbers can fluctuate drastically with even slight changes in temperature, weather conditions, degradation or pollution (Emily *et al.,* 2008).

Butterflies are also good indicator of environmental changes as they are sensitive to habitat degradation and climate changes (Kunte, 2000). Butterflies and the caterpillars are dependent on the specific host plants for foliage, nectar, and pollen as their food. This butterfly diversity consider overall plant diversity, mostly, that of herbs and shrubs in the given area. Herbs and shrubs start their life cycle in the developing of the monsoon and complete it by the end of the post monsoon season. While some shrubs like *Lantana camara* shows flowering throughout the year (Kunte 2001). Butterflies are an essential part of any natural ecosystem as their adults perform pollination and larvae act as primary herbivores. They are pollinating more than 50 economically important crop plants (Broges *et al., 2003).*

Butterflies are ecologically diverse group of insects showing complex foraging behavior during searching for food and nectar (Sourakov *et al*., 2012). The nectar of flower is the main source of adult nutrition (Omura *et al.,* 2005). The butterflies exhibit distinct differences for flower preference (Jennersten, 1984). They choose plants as nectar sources depending on various factors including colors and odors of flowers (Sourakov 2012).

Nectar is the common and available food resource for adult butterflies. Since adult life, butterflies essentially require considerable quantities of proteins, salts, vitamins etc. Butterflies do no feed indiscriminately from any flower that they might find. Their visits to different

flowers also depend on other factors like floral color, shape, size, position and arrangement in the inflorescence. In general, males allocate a high proportion of their resources to maximizing the number of eggs they fertilize, whilst females invest a significant proportion of their nutritional resources in the offspring (Trivers,1998).

Divergent morphology and behavior are driven not only by mate choice and intersexual competition, but also by ecological pressures(Temeles et *al.,* 2000).Most biological association show alter species fortune distributions, with a few numerically predominant species and many rare species,(Magurran *et al.,* ,2004).One of the commonly recommended producers for this pattern of species fortune is the scope and nature of niche allotment and competitive dominance in association (Tokeshi *et al.,* 1999)

Butterflies absorb sunlight to gain a sufficiently high body temperature for active flight behavior (Heinrich 1993). They can regulate their heat gain by behavioral changes including micro-habitat selection, frequency of basking and subtle changes in basking posture (Kingsolver, 1983).

In butterflies three different basking postures are generally recognized: dorsal basking, ventral basking, reflectance basking (Shreeve 1992). Dorsal basking means that the wings are spread to absorb radiation at the dorsal surface of the body and the basal part of the wings. When the body and particularly the flight muscles in the thorax, gained a sufficiently high heat load-often above 30C in temperate butterflies (Matthysen 1998) the butterfly can either take off again or closes its wings to rest.

Butterflies rarely compete over food or shelter (but see Peixoto *et al.*, 2012). Males of various butterfly species perch on twigs, leaves or the ground in their mating territory, which is located at at a sunspot or a small open space in forests etc., and compete over the territory via aerial interactions (Wiklund 2001).

Butterflies are evenly easy to collect, handle, identify, and photograph. Because of this, butterflies are used as a bio indicator for other pollinator species and as an umbrella species for the protection of other insects and their host plants (Harrison *et al.,* 2016).

Butterfly richness and diversity can be an indicator for effect of climate change and safeguarding restoration policy and producers (Yan swaay *et al*., 2013).

Butterfly diversity varies due to local habitat quality and management (Feber *et al.*,1997). butterflies are usually considered as one of the best taxonomically studied groups of insects (Robbins 1997*)*. Butterflies are important features of ecosystems for interchange with plants as pollinators and herbivores (Tiple *et al.*,2006*).* Along with the availability of larval and adult food plants, habitat quality appeared to be one of the most important parameters that is used to determine butterfly community structure (Barlow *et al*., 2007*).*

Many species of adult Butterflies (Order:Lepidoptera) frequently visit moist ground perspiration, tears, excrements, or animal carcasses to suck water and dissolved nutrients, this behavior conventionally termed as 'Mud-puddling' (Kunte *et al.,* 2000). Butterflies are cold blooded and requires basking under sunlight to gain energy for flying, as they feed and search mates (Kunte 2000).

Among insects, butterflies are ideal subject for ecological studies of landscapes (Thomas *et al.,* 1985), and their value as indicators of biotope quality is being increasingly recognized because of their sensitivity to minor changes in micro-habitat, in particular, light levels (Kremen 1992). Puddling is a behavior in which adult Lepidoptera feed from mud, dung, carrion, or sweat (Adler *et al.,* 1982). In at least some species, puddling is an important dietary source of sodium, a scarce nutrient in the diet of herbivores and insectivores (Smedley *et al.,* 1995).

The feeding behavior, the proboscis morphology and the micromorphology of the sensilla in particular have been discussed to be adaptations to fluid uptake from rotting fruits and other non-floral fluid sources in some taxa of the Nymphalidae (Lehnert *et al.,* 2016).Focusing on several aspects of the species biology and in particular on larval host plants predators, parasitoids, adult population dynamics and finally on courtship and mating behavior (Pinzari *et a*l., 2017).

Butterfly garden is a garden planted specifically to attract a diverse community of butterflies. These gardens may include nectar plants for adult butterflies as well as food plants for larvae. Butterfly gardens can vary in size from a window box to a garden of over an acre. Butterfly houses serve two important roles, first as a tourist cum educational activity promoting public awareness on nature conservation and secondly as a center for in situ conservation (Belcher *et al.,* 2005).

Butterfly gardening is a unique activity that helps in maintaining natural populations of various butterflies' success of this programme is dependent on a number of factors involving selection of host plants for introduction and maintaining appropriate environmental conditions (humidity/sunshine/temperature) utmost care should be taken while designing the garden. The extent of area required for setting up of butterfly gardens varies with the species diversity of that area. Several studies have surveyed butterfly diversity at sites along an urban/rural gradient. Three studies indicated that butterfly species diversity is smallest in areas of most intense development (McGeoch *et al.,* 1997).

All members and some non-members of Butterfly Conservation receive a recording form at the beginning of each year. This form has been modified recently to track changes in flight season due to global warming. Urban systems are frequently considered inhospitable for biodiversity (Devis *et al.,*2002) because the effects of urbanization on wildlife communities are intense and extend way beyond its limits (McDonnell *et al.,*2016) urban ecologists have made patent the need to consider biological conservation within urban areas (Kowarik, 2011). The basic design of the garden was prepared based on the terrain and geographical features of the area. Foraging and breeding are the important activities of butterflies.

One of the most important aspects of any conservation strategy is the identification of high-value sites on the basis of their biodiversity content (Kati et al.,2004). Butterfly gardening has been purely an aesthetic practice to attract a variety of adult butterflies to complement a floral display. However, butterfly enthusiasts and environmental organizations have recently proposed that gardens could serve as a grass-roots approach to habitat restoration by replacing lost natural habitat and serving as corridors for wildlife confined to fragmented patches of habitat (Mikula *et al.,* 2002).

Gardens is greater than would have been encountered had nectaring or oviposition occurred on plants in natural sites, then the use of gardens is at least likely to not contribute to the regional abundance of butterfly populations, and could potentially result in a net decline in butterfly abundance. Butterfly conservation are now popular not only in Britain, Europe, North America, Japan and Australia but also in some of the tropical countries like Singapore, Malaysian, Hong Kong and Kenya where free flight butterfly houses are rapidly becoming common. Butterfly houses are ideal means to offer an experience in which the visitor can observe the insects in their natural environment. These facilities maintain insect populations in a manner suitable for the provision of entertainment, education conservation and research services (Bailowitz *et al.,* 2007).

In India, although there are a number of Non-Governmental Organizations (NGOs) involved in nature conservation, there are very few agencies that cater to the conservation of invertebrates except for the recent initiatives by the Zoo Outreach Organization in Coimbatore, Tamil Nadu.

Recent reports of decline in insect population have raised alarm worldwide (Wyckhuys 2019). Temperature regulation is critical in insects, with even minor changes in ambient temperature having profound effects (Latombe *et al.,* 2019).

OBJECTIVES:

To study the behavioral traits of butterfly in the butterfly garden.

Identification of butterfly plants and classification

To study correlation of butterflies and nectar plants.

## REVIEW OF LITERATURE

The butterflies are very well known for their beauty as they bear beautiful wings of various colours. They have slender bodies, the wings are held vertically when at rest, and the antennae are slender and club-like at the tips. They are day fliers. The degree of diversity depends upon the adaptability of a species to a particular micro habitat. The dimension, population size and diversity of the species are most significant biological elements of an ecosystem (Bliss, 1992).Among the insects, butterflies occupy a vital position in ecosystems and their occurrence and diversity are considered as good indicators of the health of any given terrestrial biotope (Kunte 2000; Aluri and Rao 2002; Thomas 2005).

(Debapriya *et. al.*, 2017) studied, different behavioural activities of the butterflies in the set up garden. Various activities such as basking, resting, flight, courtship flight, chasing, mating, mudpuddling etc.it reported many species of butterfly were observed during the study period. Many were short time visitors which came for nectaring, but did not stay as suitable host plants and other conditions were not available. 20 species which were regularly seen were chosen for behavioral study in the restored habitat of the newly established garden.

(Palma *et.al*.,2014) reported that Basking was seen in non-flower habitat, like mud, rock, wastes, etc. in arctic butterflies. Basking behavior was observed in most of the species. Plains Cupid was observed to spend maximum time on basking.

Several reports have emphasized that choice of nectar feeding on particular flower and egg laying preferences onto the particular leaf of same or different plant species (Tible *et.al*.,2006). (Kumar, 2011) Butterflies are essential part of any natural ecosystem as their adults performs pollination. They are highly mobile organism and are able to maintain connectivity between the fragmental habitats. The larval stages are herbivorous and cause

economic damage but adult are beneficial as pollinators of several trees and herbaceous flora. They are vulnerable to changes in flower supply resulting from deforestation and environmental pollution hence they are the biological indicators of pollution.

Nectar is basically a sugar solution composed of one disaccharide (sucrose) and two hexoses (glucose and fructose). Particularly, nectar is expected to diverge among different plant lineages and thus differ among taxa because different pollinators show preferences for solutions of different viscosity and/or sugar composition  To attract pollinators, plants offer different types of rewards. However, floral nectar represents the main plant reward for many pollinators and thus a putative primary selection target; (Baker and Baker, 1995).larval stages of butterflies mainly feed on leaves of different plant species. They are very specific in their feeding habits. Butterfly larvae recognize their host plants containing certain aromatic vegetable oils. It is generally believed that selection may depend upon the detection of chemical attractants in the food species. Most of the larval host plants of Indian butterflies were recorded.

Raju *et al.*, 2004 recorded 39 butterfly species utilizing the floral nectar of 47 plant species belonging to 21 families. Butterfly habit, flowering season, floral colour, and floral characteristics are also described. (Arvind 2005) reported *Ficus pumila* as a new host plant of Common Crow butterfly. Common Crow *Euploea core* commonly fed on *Ficus racemosa*; Nerium sp. and *Cryptolepis buchanani.*

Meerabai 1994 reported that Most of butterflies with the characteristic long proboscis feed on floral nectar and the *Heliconius* butterflies feed on pollens as well. They rely mostly on flower color for locating and identifying the flowers while foraging on nectar, they carry pollen on their body parts. (Subba Reddy and Meerabai 1986) studied the relation between flowers

and butterflies. 40 species of butterflies of Vishakhapatnam were found to be obligate nectar feeders. These butterflies were found foraging on 67 nectar plant species over 28 plant families.

(Venkata 2010) recorded Butterfly mating behavior at Aligarh and majority of the species from Danaid, Nymphalid, Satyrid, Lycinids,Hespirriids, Acraeids are using fluttering mechanism and Papilionids showed drumming behaviour.

Among various groups of butterflies, the Swallowtails are the best studied group of Lepidoptera and several studies have been made on their life history, polymorphism, and host associations. Porter (1986) observed that females mate several times during their lifetime and develop eggs when necessary fat reserves or food are available. Most butterflies lay 100-500 eggs during their life span. The eggs of butterflies are usually spherical in shape. Singh (1991) made a survey of the natural enemies of four species of Papilio, viz., *P. demoleus*, *P. polytes*, *P. polymnestor* and *P. helenus* in Tamil Nadu, and reported several species of parasites such as *Apanteles papilionis, Holcojoppa coelopyga, Melalophacharops sp., Brachymeria jambolana* and *Pteromalus puparum.*

The butterfly species use leaf for egg-laying as well as feeding by ~ 1907 ~ Journal of Entomology and Zoology Studies larvae. Ramana *et al.*,1997) studied the life history and morphology of *Papilio polytes* in Andhra Pradesh. The development was completed from egg to adult within 28-30. This butterfly which is multivoltine, produced 11-12 generations in a year and the peak population was during August-February.

Kalita and Kakati (2002) studied the adult, pupal and larval behaviour of C. clytia in Assam. They mentioned that the life cycle was completed within 28- 30 days and larval duration was 12-13 days. Gravid females laid 2-3 eggs in 5 minutes on the plants.

Cormont *et.al.*,2011 said that Flight behaviour depends upon local weather condition of the season Watanabe and Imoto (2003) observed the flying habits of the Japanese Sulfur Butterfly, Colias erate in an open habitat. This study evaluated the impact of the thermal environment on the flying behavior of male Japanese Sulfur. Butterflies searching for females in an open habitat. Mean thoracic temperature of butterflies immediately after landing was consistently higher, but independent of ambient temperature. Although ground speed of flying butterflies was different between flight types, air speed against the butterfly was similar across flight types. The excess of thoracic over ambient temperature was lower in flying butterflies than in basking ones, as predicted by a model. This difference appeared to be due to air current, which enhanced heat loss.

Butterflies sit on the wet soil for absorbing minerals which fulfil their various physiological requirements. (Amol *et al.*, 2019) reported that the mud puddling activity are actively engage in the butterflies and they reported that they prefer a puddling site which is relatively flat, around 3 to 5 meters wide. The puddling time was mostly seen between 8 AM to 1 PM. Butterflies get hangover while puddling. During puddling butterflies are prone to predation. Some species form Single Species Group or Closed Group while some species form Multiple Species Group. Species of Lycaenidae and Nymphalidae showed overall higher puddling affinity while Papilionidae showed overall less affinity.

Butterfly population size, vulnerability and structure together constitute perhaps the most urgent information required for any possible conservation target. Protection of locations with a relatively large number of native species is thought to be an efficient way to maintain overall biodiversity. Butterfly gardens are the 'gate-ways' to protect the butterfly population and promoting in-situ conservation. Recently, butterfly gardens and butterfly houses have become popular in several Asian, European and American countries.

Butterfly gardening has been defined as an art of growing plants to attract butterflies (Booth and Allen, 1990). The first butterfly exhibit was opened in the year 1960 in England (Hughes and Bennett, 1991). Management of domestic gardens and urban and suburban gardens to encourage butterflies has become more frequent and in the UK a national garden butterfly survey was launched in 1990 with the objective of discovering how butterflies may be fostered in gardens and as the start of a survey of year to year changes in butterflies in gardens (Vickery, 1995). Vickery also emphasized the great value of gardens sources of nectar for butterflies, especially in spring and autumn when wild nectar sources may be scarce. Kunte (2008) published a paper on the Wildlife Protection Act and conservation prioritization of butterflies of the Western Ghats. The most important legal system for protection of endangered animals in India is the Wildlife (Protection) Act, 1972.

In India, our knowledge of butterfly gardening and their importance in promoting the in-situ conservation of butterflies through has been greatly enhanced through the studies carried out at KFRI during 1993-1996 (Mathew, 1998 and 2001). Mathew and Anto (2007) studied the in situ propagation of butterflies through establishment of a butterfly garden in Kerala and continuous monitoring and field observations showed a steady increase in sightings with 69 species of butterflies being recorded in the butterfly garden at KFRI campus, Peechi. Participation of the public is essential for the success of any conservation program, so we have

to generate interest among the public for conserving biodiversity. Students form the most important target group in conservation programmes and the formation of Bio-parks in schools through students' participation is a very effective method to achieve biodiversity conservation (Mathew and Yesodharan, 2010). Mohandas and Remadevi (2012) studied the role of butterfly gardens as tools for development of ecotourism infrastructure in protected areas of central Western Ghats in Karnataka and to examine the suitability of various butterflies for captive breeding in ex situ conservation and for butterfly exhibitory programmes.

## MATERIALS AND METHODS

### Site selection

The site selected for establishing the garden was a highly degraded site at the American college campus near Wallace boy's hostel. Landscaping and introduction of host plants was done to recreate butterfly habitats. The basic design of the garden was prepared based on the terrain and geographical features of the area. Foraging and breeding are the important activities of butterflies. Hence, while designing the components of the garden, due consideration was given to the habitats and they were recreated through landscaping. In order to facilitate observation of butterflies present in the various recreated habitats, a nature trail was also laid out traversing the habitat. The size of butterfly garden was 2 cent, the following plants were planted, *Ixora coccinea, Pentas lanceolata, Citrus limon, Leucas aspera, Murraya koenigii, Synedrella nodifora, Latana camera, Polyalthia longifolia, Cassia siamea, Hibiscus rosasinensis, Nerium oleander, Calandula officinalis, Crossandra infundibuliformis.* These include butterfly nectar and host plants.

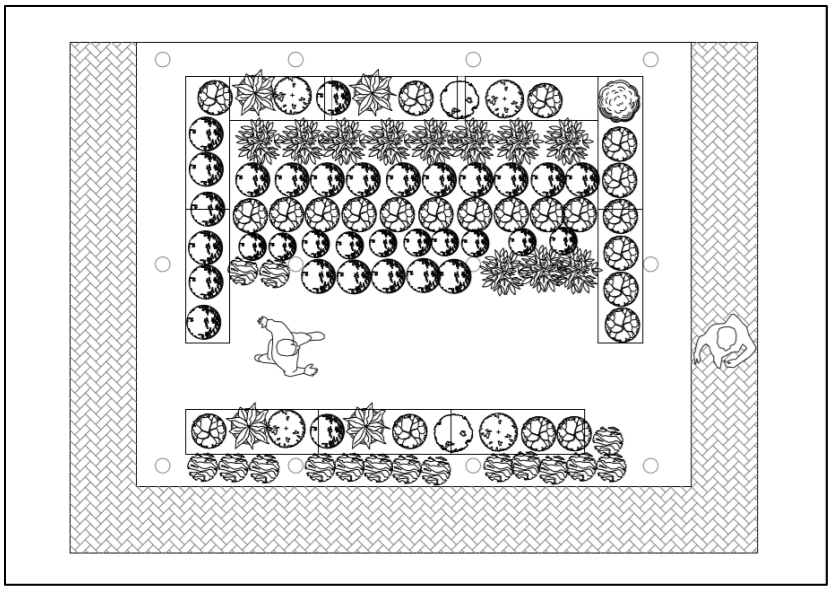
### Field site

The study was conducted from November 2019 to March 2020, in Butterfly garden, The American College, Madurai. Butterfly diversity survey is one of the biggest ways of assessing the total diversity at broad level. Observation were taking every week in morning 7:00am to evening 5:00pm, Field visit was done every weekend. The butterfly garden in American college campus located in the heart of the city, it has canopy of trees and shrubs. There are different species of plants which supports wide variety of butterfly species. Temperature and Humidity of the garden was noted in every field visit. The butterflies were photographed as and when possible.

### Monitoring and Recording of Butterfly Population Trends

In order to evaluate the effect of habitat enrichment, regular monitoring of the fauna was carried out by making weekly transect counts and recording their number for the entire study period from November 2019 to March 2020. A visual survey was done during each sampling period. The butterflies were identified on wing and the date of observation, number of species and individuals were recorded.

**Plates.1 Garden view**









**Plates.2 Study area (Butterfly garden, Near Wallace Hostel, The American College Google Map view*)***






## RESULT

Butterflies serve as important plant pollinators in the local environment, and help pollinate more than 50 economically important plant crops. Butterfly gardening is a unique activity that helps in maintaining natural populations of various butterflies within narrow strips of lands that might become available for such activities. Since the success of this program is dependent on a number of factors involving selection of host plants for introduction and maintaining appropriate environmental conditions (humidity/temperature) utmost care should be taken while designing the garden. In the present study, very good results were obtained even with a minimum area of land with wide spectrum of butterfly fauna. The garden was a highly degraded site at the American college campus near Wallace boy's hostel. The size of butterfly garden was 2 cent, the following plants were planted, *Ixora coccinea, Pentas lanceolata, Citrus limon, Leucas aspera, Murraya koenigii, Syenedrella nodiflora, Latana camera, Polyalthia longifolia, Cassia siamea, Hibiscus rosasiensis, Nerium oleander, Calendula officinalis. Crossandra infundibuliformis(table* 1). These include butterfly nectar and host plants. In the butterfly garden, where the most of butterfly were flower visiting and feeds nectar for their nutrient balance. Behavioral activities of butterfly species in set up garden, where the most of butterfly were flower visiting and feeds nectar for their nutrient balance.

### Behavioral activities of butterfly species in set up garden

As part of the study, different behavioral activities of these butterflies were seen in the set up garden.The behaviors of 28 types of butterflies were observed. They are hovering, chasing, resting, nectaring, mud-puddling, mating and egg laying. Behavioral allocation in man hours (in sec/activity) of different activities in different species of butterflies was done over a period of 5 months (table 5). There are 7 types of behaviors were observed from November 2019-March 2020. Most of the butterflies visited the garden only in the month of February.

**Figure.1 Differential average activities shown by different species of butterflies**

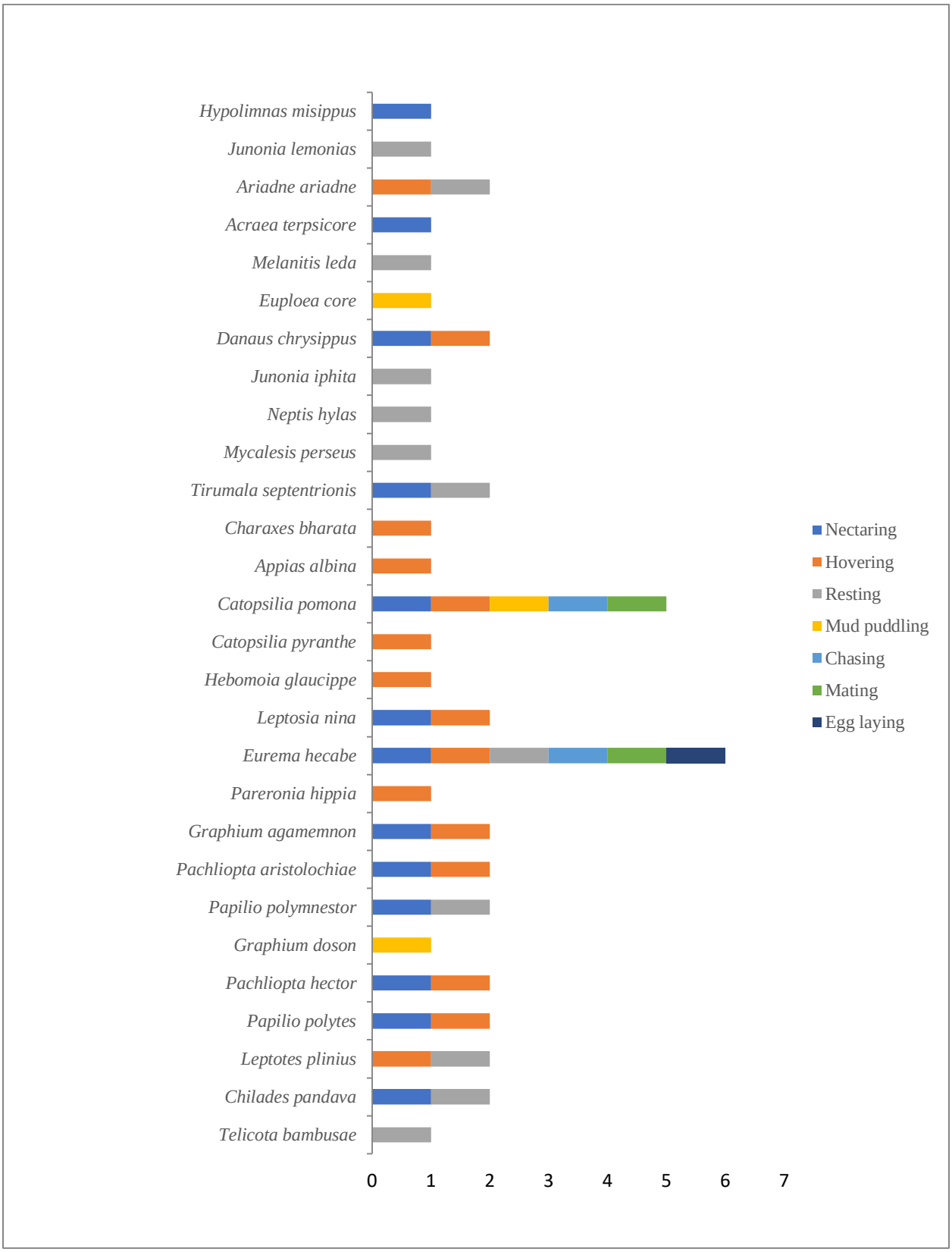
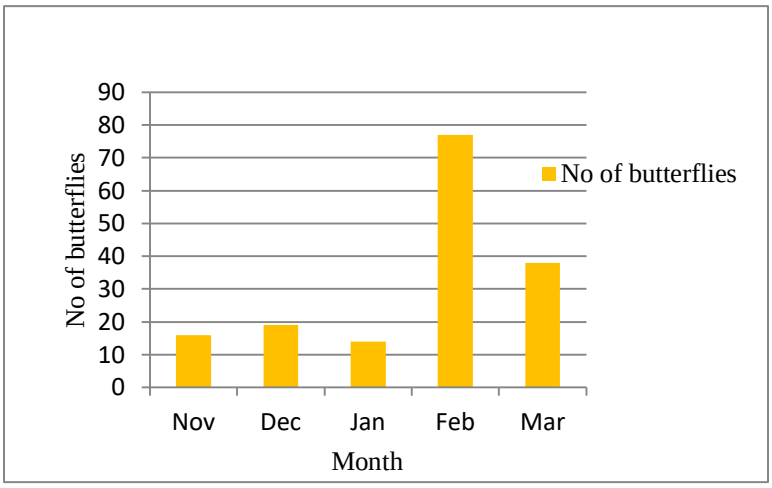


**Fig.2 Resting behavior of butterflies in butterfly garden**



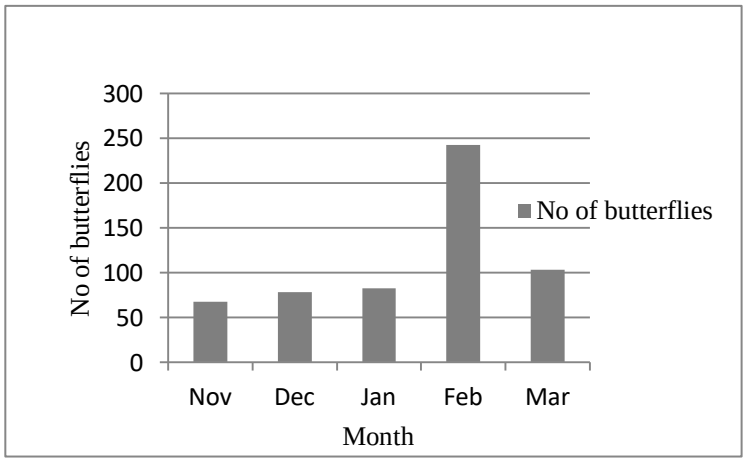

**Plates.3 Resting behavior of butterflies in butterfly garden**





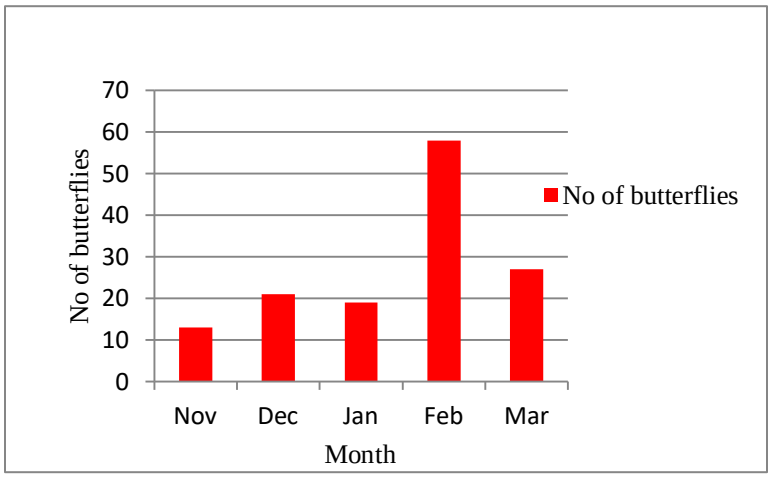
Resting activity was observed in *Leptosia nina, Catopsilia pomona***,** *Melantis leda, Junonia iphita, Mycalesis perseus, Junonia lemonis, Ariadne ariadne, Papilio polymnestor, Leptotes plinius, Telicota bambusae.*

**Fig.3 Hovering behavior of butterflies in butterfly garden**

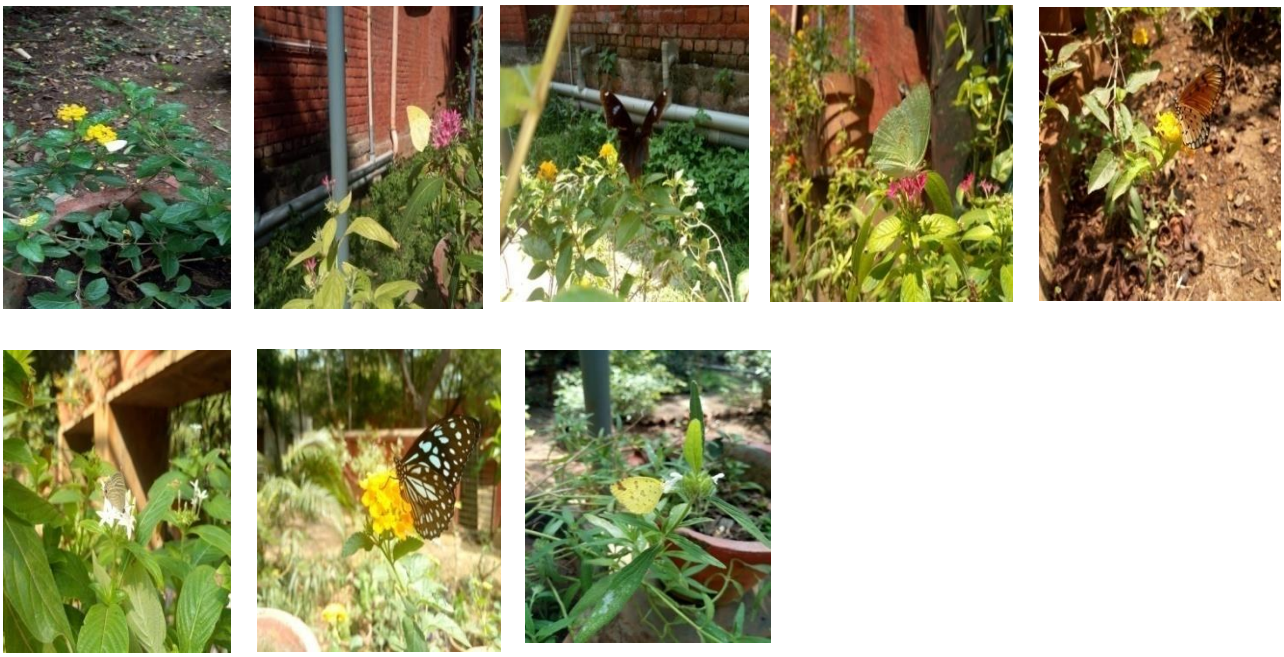



*Leptosia nina, Catopsilia pomona***,** *Eruema hecabe, Catopsilia pyranthe, Pareronia hippa Hebomoia glaucippe, Graphium agamemnon, Pachliopta aristolochiae, Leptotes plinius, Telicota bambusae, Appias albina, Charaxes bharata, Denaus chrysippus, Ariadne ariadne* spent maximum time on hovering.

**Fig.4 Nectaring behavior of butterflies in butterfly garden**

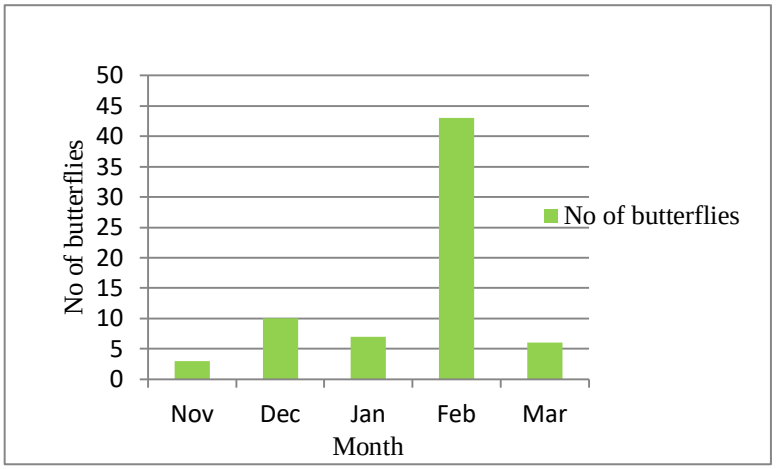



**Plates.4 Nectaring behavior of butterflies in butterfly garden**



*Eruema hecabe*, *Leptosia nina*, *Acraea terpsicore*, *Tirumala septentrionis*, *Pachliopta hector*, *Pachliopta aristoloachiae*, *Graphium agamemnon*, *Chilades pandava*, *Hypolimas misippus* were observed to nectaring. *Papilio polytes* spent maximum time on nectaring.

**Fig.5 Mud puddling behavior of butterflies in butterfly garden**

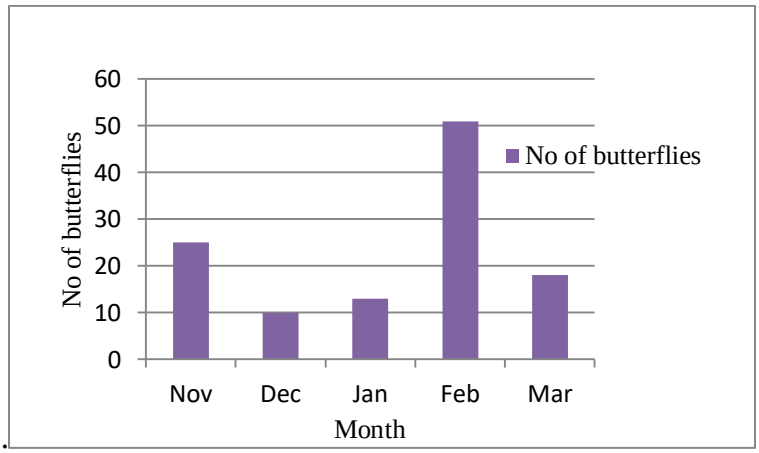



**Plates.5 Mudpuddling behavior of butterflies in butterfly garden**



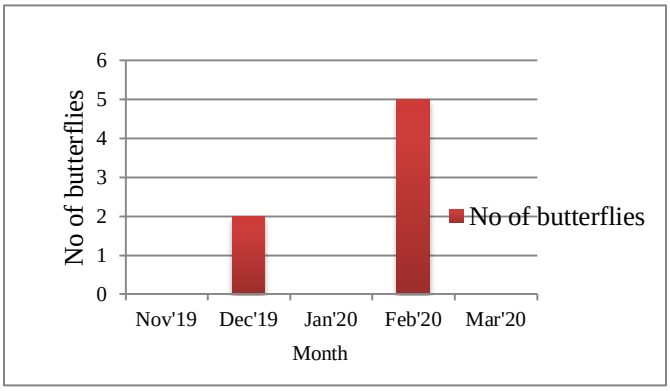
*Catopsilia pomona, Neptis hylas, Graphium doson, Euploea core* were observed to mudpuddling. *Neptis hylas* spent maximum time on mud-puddling.

**Fig.6 Chasing behavior of butterflies in butterfly garden**




Chasing activity was observed in *Eruema hecabe, Catopsilia pomona.*

**Fig.7 Mating behavior of butterflies in butterfly garden**



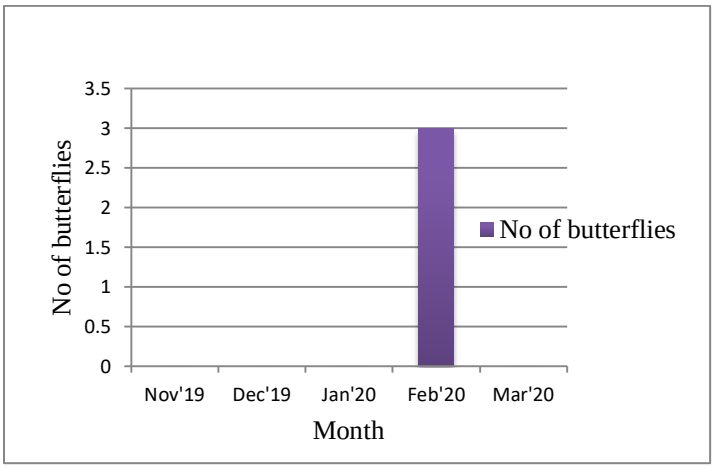

**Plates.6 Mating behavior of butterflies in butterfly garden**





*Eurema hecabe, Catopsilia pomona* were observed to mating.

**Fig.8 Egg laying behavior of butterflies in butterfly garden**




Egg laying activity was observed in *Eurema hecabe.*

**Butterfly families**

**Pieridae**

In the present study the following butterflies that belong to the family Pieridae were observed. Common grass yellow-*Eurema hecabe,* Psyche-*Leptosia nina,* Mottled emigrant-*Catopsilia pyranthe,* Lemon emigrant-*Catopsilia pomona,* Common albatrose-*Appias albina, G*reat orange tip-*Hebomoia glaucippe.* Indian wanderer-*Pareronia hippie* (Table 2).

**Papilionidae**

Common mormon-*Papilio polytes,* Blue mormon-*Papilio polymnestor,* Common rose-*Pachliota aristolochiae,* Crimson rose-*Pachliopta hector,* Tailed jay-*Graphium agamemnon,* Common jay-*Graphium doson***(**Table 2) are the butterflies that belong to the family Papilionidae were observed.

**Nymphalidae**

Denaid egg fly-*Hypolimnas misippus,* Lemon pansy-*Junonia lemonias,* Angled castor-*Ariadne ariadne,* Tawny coaster-*Tcraea terpsicore,* Common evening brown-*Melanitis leda,* Common crow-*Euploea core,* Plain tiger-*Danaus chrysippus,* Chocolate pansy-*Junonia iphita,* Common sailer-*Neptis hylas,* Indian naweb-*Charaxes bharata,* Common bush brown-*Mycalesis perseus,*dark, Blue tiger-*Tirumala septentrionis.*(Table 2) these are the observed butterflies that belongs to the family Nymphalidae .

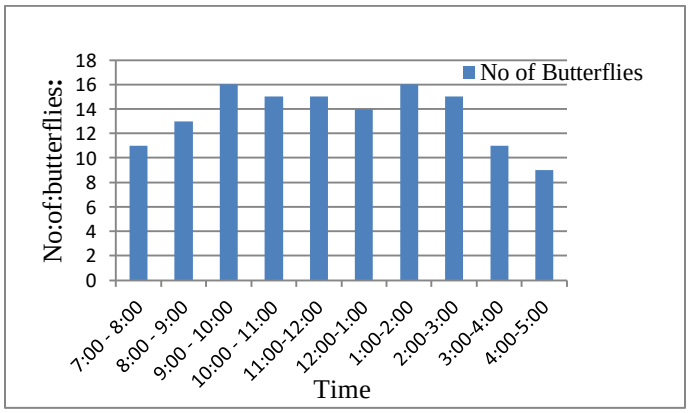
**Lycaenidae**

Plains cupid-*Chilades pandava,* Zebra blue-*Leptotes plinius.* (Table 2) these are the butterflies that belongs to the family Lycaenidae .

**Hesperidae**

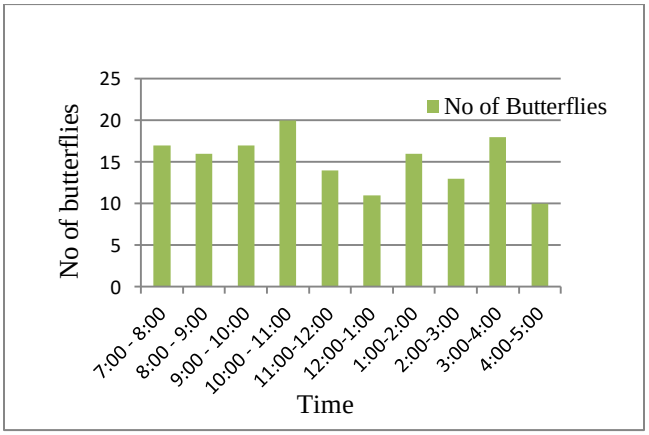
As per the study this is the butterfly that belongs to the family Hesperidae Dark plam dart-*Telicota bambusae* (Table 2).

**Fig.9 Prevalence of Butterflies in November-2019**



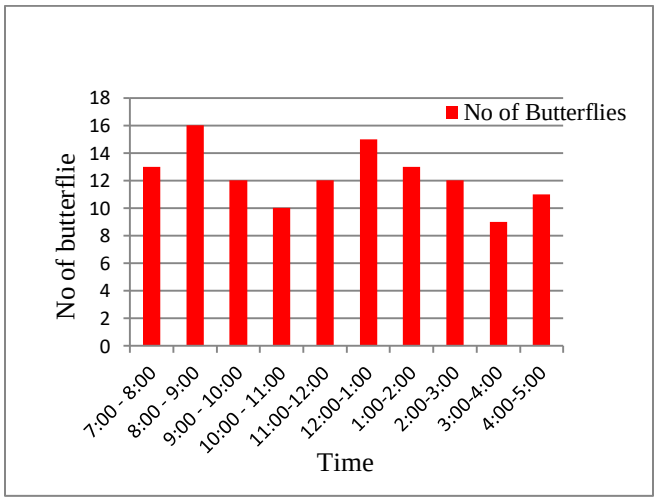

In the month of November *Eurema hecabe*, *Catopsilia pomona* ,*Papilio polytes* are the butterflies seen in the garden between at 9:00 to 10:00 am and 1:00 to 2:00 pm. Prevalence of Butterflies were low in the garden due to rainy season. The humidity (56.8%)/temperature ($25.4^0$C) levels were also low due to rainy.

**Fig.10 Prevalence of Butterflies in December-2019**



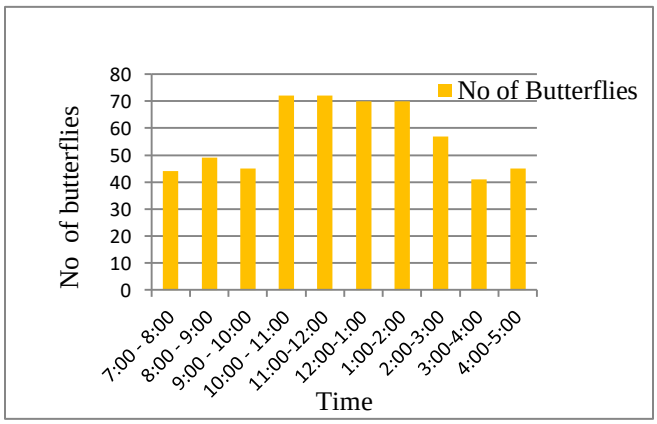

In December *Eurema hecabe*, *Catopsilia pomona*, *Euploea core* butterflies are seen in the garden between 10:00 to 11:00 am. The humidity (57.4%)/temperature ($25.9^0$C) level were also low.. Butterflies visited in the garden were low due to rain in December.

**Fig.11 Prevalence of Butterflies in January-2020**



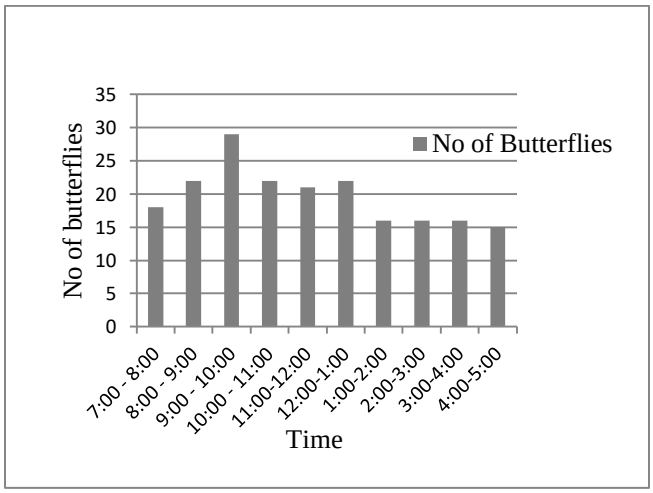

In January *Leptosia nina, Eurema hecabe, Catopsilia pomona* are seen in the garden between 8:00-9:00 pm. Butterflies were partially visited in the garden due to mild temperatures during the month of January. The humidity (68.4%)/ temperature (26.7$^0$C) was slightly higher.

**Fig.12 Prevalence of Butterflies in February-2020**




In February *Junonia iphita, Pachliopta aristolochiae, Hypolimnas misippus, Leptosia nina, Eurema hecabe , Catopsilia pomona* butterflies are seen in the garden between10:00 to 12:00 am. Most of the butterflies are visited in the garden only in February. Because of high temperature (29.5$^0$C)/ humidity (72.5%).

**Fig.13 Prevalence of Butterflies in March-2020**




In March *Catopsilia pomona, Eurema hecabe, Euploea core, Leptosia nina, Junonia iphita*, butterflies are observed in the garden between 9:00 to 10:00 am. Medium numbers of butterflies are visited in the garden in March. Because, the temperature (28.5)/humidity (69.7%) remains normal.

In the present study was carried out for 5 months (November 2019- March 2020). and totally 28 butterflies were observed from November to March.Many butterflies were visited the garden regularly. The Prevalence of family Pieridae were in the month of November to March. Lemon emigrant (*Catopsilia pomona)* of family Pieridae was observed frequently in the month of November. Common grass yellow (*Eurema hecabe)* of family Pieridae was recorded mostly during the month of December. Psyche (*Leptosia nina)* of the family Pieridae was observed most frequently in the month of January. Lemon emigrant (*Catopsilia pomona)* of family Pieridae visited the garden frequently during the month of February. Common grass yellow (*Eurema hecabe)* of family Pieridae observed most frequently during the month of March.

**Table.1 Plants in the butterfly garden**

| S.NO | NAME OF THE PLANT | NAME OF THE SPECIES | FAMILY NAME |
|---|---|---|---|
| 1 | Rose pentas | *Pentas lanceolata* | Rutaceae |
| 2 | Thumbai | *Leucas aspera* | Lamiaceae |
| 3 | Karuvepillai | *Murraya koengii* | Rutaceae |
| 4 | Latana(yellow) | *Latana camara* | verbenaceae |
| 5 | Latana(red) | *Latana camara* | verbenaceae |
| 6 | Askhoka | *Polyalthia longiflolia* | Annonaceaae |
| 7 | White pentas | *Pentas lanceolata* | Rutaceae |
| 8 | Red pentas | *Pentas lanceolata* | Rutaceae |
| 9 | Hibiscus | *Hibiscus rosasinesis* | Malvaceae |
| 10 | Cassia | *Cassia siamea* | caesalpiniaceae |
| 11 | Arali | *Nerium oleander* | Apocynaceae |
| 12 | Maarygold | *Calandula officinalis* | Asteraceae |
| 13 | Kalvalai | *Canna indica* | Cannaceae |
| 14 | Ixora | *Ixora coccinea* | Rubiaceae |
| 15 | Lemon | *Citrus limon* | Rutaceae |
| 16 | Small (yellow) | *Synedrella nodiflora* | Asteraceae |
| 17 | Kanakambaram | *Crossandra infundibuliformis* | Acanthaceae |
| 18 | Money plant | *Epipremnum aureum* | Araceae |

**Table.2 Butterflies prevalent in butterfly garden**

| S.NO | COMMON NAME | SCIENTIFIC NAME | FAMILY |
|---|---|---|---|
| 1 | Danaid Egg Fly | *Hypolimnas misippus* | Nymphalidae |
| 2 | Lemon Pansy | *Junonia lemonias* | Nymphalidae |
| 3 | Angled Caster | *Ariadne ariadne* | Nymphalidae |
| 4 | Tawny Coaster | *Acraea terpsicore* | Nymphalidae |
| 5 | Common Evening Brown | *Melanitis leda* | Nymphalidae |
| 6 | Common Crow | *Euploea core* | Nymphalidae |
| 7 | Plain Tiger | *Danaus chrysippus* | Nymphalidae |
| 8 | Choclate Pansy | *Junonia iphita* | Nymphalidae |
| 9 | Common sailer | *Neptis hylas* | Nymphalidae |
| 10 | Common Bush Brown | *Mycalesis perseus* | Nymphalidae |
| 11 | Dark blue tiger | *Tirumala septentrionis* | Nymphalidae |
| 12 | Indian Naweb | *Charaxes bharata* | Nymphalidae |
| 13 | Common Albatrose | *Appias albina* | Pieridae |
| 14 | Lemon Emigrant | *Catopsilia pomona* | Pieridae |
| 15 | Mottled Emigrant | *Catopsilia pyranthe* | Pieridae |
| 16 | Great orange tip | *Hebomoia glaucippe* | Pieridae |
| 17 | Psyche | *Leptosia nina* | Pieridae |
| 18 | Common Grass yellow | *Eurema hecabe* | Pieridae |
| 19 | Indian Wanderer | *Pareronia hippia* | Pieridae |
| 20 | Tailed Jay | *Graphium agamemnon* | Papilionidae |
| 21 | Common Rose | *Pachliopta aristolochiae* | Papilionidae |
| 22 | Blue Mormon | *Papilio polymnestor* | Papilionidae |
| 23 | Common jay | *Graphium doson* | Papilionidae |
| 24 | Crimson Rose | *Pachliopta hector* | Papilionidae |
| 25 | Common Mormon | *Papilio polytes* | Papilionidae |
| 26 | Zebra Blue | *Leptotes plinius* | Lycaenidae |
| 27 | Plains Cupid | *Chilades pandava* | Lycaenidae |
| 28 | Dark Palm-Dart | *Telicota* bambusae | Hesperiidae |

**Plate.7 Prevalence of butterflies in butterfly garden**



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1.*Leptotes Plinius* 2.*Leptosia nina* 3.*Telicota bambusae* 4.*Papilio polymnestor* 5.*Euploea core* 6.*Eurema hecabe* 7.*Melanitis leda* 8.*Catopsilia pomona* 9.*Mycalesis perseus* 10.*Junonia iphita*11.*Neptis hylas* 12.*Tirumala septentrionis* 13.*Junonia lemonias* 14.*Graphium doson* 15.*Pachliopta aristolochiae* 16.*Hebomoia glaucippe* 16.*Hypolimnas misippus* 17.*Pachliopta hector* 18.*Danas chrysippus* 19.*Chilades pandava* 20.*Acraea terpsicore* 21.*Pareronia hippie* 22.*Catopsilia pyranthe* *23.Appias albino* *24.Hebomoia glaucippe* *25.Papilio polytes* *26.Graphium agamemnon* *27.Ariadne ariadne* *28.Charaxes bharata*

**Table.3 Temperature and humidity during study period in butterfly garden**

| S.NO | MONTH | TEMPERATURE ($^0$C) | HUMIDITY (%) |
|---|---|---|---|
| 1 | November | 25.4 | 56.8 |
| 2 | December | 25.9 | 57.4 |
| 3 | January | 26.7 | 68.4 |
| 4 | February | 29.5 | 72.5 |
| 4 | March | 28.5 | 69.7 |

## DISCUSSION

Butterflies are one of the best-known and charismatic groups of fauna (Asher *et al.*, 2001). Encounters with these easily identifiable creatures, along with garden birds, are among the first real contacts many people have with wildlife, and the careers of many keen professional and amateur naturalist have been inspired by such sightings. Urban areas have come under closer investigation in recent times due to the recognition that conservation and management of urben habitats and species pose particular challenges (Angold *et al.,* 2006). Because of the intrinsic appeal, generally known life-history requirements, and sensitivity to small changes in site conditions, butterflies have often been a significant part of various studies (Pulin 2002). Some large-scale studies have focused wholly or partially on butterflies as indicators of urbanization/or the effect of urbanization (Bock *et al.,* 2007).

Butterfly gardening is a unique activity that helps in maintaining natural populations of various butterflies within narrow strips of lands that might become available for such activities. Since the success of this programme is dependent on a number of factors involving selection of host plants for introduction and maintaining appropriate environmental conditions (humidity /temperature) ulmost care should be taken while designing the garden. In present study very good results were obtained even with a minimum area of land with wide spectrum of butterfly fauna.

A study in Dhaka University garden, Bangalesh reports Compositae Verbenacaeae, Asteracaeae, Amaranthaceae, Labiateae,Viticeae and Apocynaceae harbour several butterfly species (Begum *et al* ., 2014). In the present study, it was found that the attracting plant species belonged to Rutaceae, Verbenaceae, Malvaceae, Asteraceae, Lamiaceae, Cannaceae, Acanthaceae, Araceae, Annonaceae, Caesalpiniaeceae family.

Behavioral allocation in man hours (in sec/activity) of different activities in different different species of butterflies was done over a period of 5 months. Family Nymphalidae, Papilionidae and Pieridae have been generally seen mud-puddling. (Sharma *et al.*,2013). Mud-puddling behaviour helps males for reproductive success due to sodium uptake from mud, wet soils etc. This activity serves sodium and amino acids to the female with the spermatophore transfer by males during mating as a nuptial gift. This also supports nutrition enhancement for

the survival rate of the eggs (Molleman F *et al.*, 2014). *Catopsilia pomona, Neptis hylas, Graphium doson, Euploea core* were observed to mudpuddling. *Neptis hylas* spent maximum time on mud-puddling. Males are frequently assumed not to be constrained by their sperm supplies, and thus have an almost unlimited reproductive capacity. However males of many species require a period of recovery following mating (Wedell *et al.*, 2002). *Eruema hecabe, Catopsilia pomona* were observed to mating behavior.

Butterflies are ecologically diverse group of insects showing complex foraging behavior during searching for food and nectar (Sourakow *et al.*, 2012). The nectar of flower is the main source of adult nutrition (Omura and Honda, 2005). The butterflies exhibit distinct differences for flower preference. They choose plants as nectar sources depending on various factor including colors and odors of flowers (Sourakow *et al* .,2012). *Eurema hecabe, Leptosia nina, Acraea terpsicore, Tirumala septentrionis, Pachliopta hector,Pachliopta aristoloachiae, Graphium agamemnon, Chilades pandava, Hypolimas misippus* were observed to nectaring. *Papilio polytes* spent maximum time on nectaring.

Butterflies are seasonal in their occurrence. The months when adults are active are called as flight periods. The availability of the larval host plants is dependent on season, the plant in correct growth stage, appropriate temperature and humidity. Flight periods were also recorded. Butterflies occur seasonally being common for few months and seen rarely or not at all in other months. Record of seasonal appearance of different species was kept from November to March. *Eurema hecabe, Leptosia nina, Catopsilia pomona*. These butterflies all visited my garden a lot from November to March. We have also seen some butterflies like *Hebomoia glaucippe, Acraea terpsicore Charaxes bharata* etc. for short time in the garden. It has to be observed if more visits are made by them in future. Availability of larval plants will be most crucial for their sustenance. Otherwise they will remain as passing visitors searching for host plants. The present study was conducted in college campus by setting up a garden also supports this notion. Though the area was a smaller one, through proper planning and planting of suitable plants it was successful in increasing the butterfly diversity (Chakraborty Thakur D *et al.*, 2017).

## SUMMARY

- Butterflies behavior study was undertaken in Butterfly garden- The American College, Madurai from November 2019-March 2020.
- In butterfly garden 28 species of butterflies were documented during study period.
- Among butterflies Lemon emigrant (Catopsilia pomona), Common grass yellow (Eurema hecabe), Psyche (Leptosia nina) observed in maximum number.
- In February month maximum numbers of butterflies were observed and minimum number in November observed.
- The butterflies perform these following acts in the butterfly garden.

## REFERENCES


Ahmed Tanvir et al., (2019), An observation on mud-puddling butterflies at mid-night in Satchari National Park published by NeBIO. Pg.no 123-125.

Barlow, Jos, et al. "Diversity and composition of fruit-feeding butterflies in tropical Eucalyptus plantations." *Plantation Forests and Biodiversity: Oxymoron or Opportunity?*. Springer, Dordrecht, 2007. 165-180.

Begum M et al., (2014), Nectar feeding behavior of some butterflies in the botanical garden of Dhaka University published by Bangladesh Journal of Zoology.

Begum, Murshida, Ummey Habiba, and Moksed Ali Howlader. "Nectar feeding behavior of some butterflies in the botanical garden of Dhaka University." *Bangladesh Journal of Zoology* 42.1 (2014): 85-90.

Belcher, B., and M. Ruiz Perez. "Achdiawan. R. 2005. Global Patterns and Trends in the Management of Commercial NTFPs: Implications for Livelihoods and Conservation." *World Development* 33.9

Berwaerts K et al., (2001), Effect of manipulation wing characteristics and basking posture on thermal properties of the butterfly *Parargeaegeria* (L.) published by The Zoological Society of Landon. Pg.no 261-267.

Bock, Carl E., et al. "Butterflies and exurban development in southeastern Arizona." *Landscape and Urban Planning* 80.1-2 (2007): 34-44.

Bourn Nigel A D et al., (2019), Celebrating 50 years of butterfliy conservation: a special issue on the ecology and conservation of butterflies and moths published by Journal of Insect Conservaation. Pg.no 199-200.

Chakraborty Thakur, D., P. Chakrabarti, and A. Chaudhuri. "An approach for butterfly conservation through setting up a garden in an urban area." *Kolkata, India. World Scientific News* 61.2 (2017): 69-85.

Collinge, Sharon K., Kathleen L. Prudic, and Jeffrey C. Oliver. "Effects of local habitat characteristics and landscape context on grassland butterfly diversity." *Conservation biology* 17.1 (2003): 178-187.

Cook, Penny A., and Nina Wedell. "Ejaculate dynamics in butterflies: a strategy for maximizing fertilization success?." *Proceedings of the Royal Society of London. Series B: Biological Sciences* 263.1373 (1996): 1047-1051.

Dover John W et al., (2015), The ecology and conservation of butterflies and moths published by Journal Of Insect Conservation.

Forister, Matthew L., et al. "Increasing neonicotinoid use and the declining butterfly fauna of lowland California." *Biology letters* 12.8 (2016): 20160475.

Griese, Eddie, et al. "Plant responses to butterfly oviposition partly explain preference–performance relationships on different brassicaceous species." *Oecologia* 192.2 (2020): 463-475.

Gupta, S. "Study of Butterfly Diversity from Campus area of Amolokchand Mahavidyalaya Yavatmal, Maharashtra, India." *Int. J. of Life Sciences* 6.1 (2018): 279-281.

Hannum, Emily, Meiyan Wang, and Jennifer Adams. "Urban-rural disparities in access to primary and secondary education under market reform." *One country, two societies* (2008): 125-146.

Ide, Jun-Ya. "Weather factors affecting the male mate-locating tactics of the small copper butterfly (Lepidoptera: Lycaenidae)." *European Journal of Entomology* 107.3 (2010).

Kamrunnahar S et al., (2018), Basking behavior in some nymphalid butterflies of Bangladesh published by Journal of biodiversity, conservation, bioresources, management. Pg.no 63-69.

Kemp Darrell J et al., (2004), Behavioural thermoregulation in butterflies: the interacting effects of body size and basking posture in *Hypolimnasbolina*(L.) (Lepidoptera: Nymphalidae) published by Australian Journal of Zoology. Pg.no 229-236.

Kingsolver, Joel G., and M. A. R. Koehl. "Aerodynamics, thermoregulation, and the evolution of insect wings: differential scaling and evolutionary change." *Evolution* 39.3 (1985): 488-504.

Kowarik, Ingo. "Novel urban ecosystems, biodiversity, and conservation." *Environmental pollution* 159.8-9 (2011): 1974-1983.

Launer, A. E., et al. "Puddling behavior by bay checkerspot butterflies (Euphydryas editha bayensis)." *J. Res. Lepid* 32 (1996): 45-52.

Lewins Z et al., (2007), Effect of Adult feeding on Male mating behavior in the butterfly, *Bicyclusanynana* (Lepidoptera: Nymphalidae) published by Journal of Insect Behavior. Pg.no 201-208.

Mathew, George, and Mary Anto. "In situ conservation of butterflies through establishment of butterfly gardens: A case study at Peechi, Kerala, India." *Current Science* (2007): 337-347.

McGeoch, M. A., and S. L. Chown. "Impact of urbanization on a gall-inhabiting Lepidoptera assemblage: the importance of reserves in urban areas." *Biodiversity & Conservation* 6.7 (1997): 979-993..

McKinney, Michael L. "Effects of urbanization on species richness: a review of plants and animals." *Urban ecosystems* 11.2 (2008): 161-176.

Mohan K et al., (2013), Kinetic study on butterfly diversity in erode district, Tamilnadu published by Applied Biology.

Molleman F et al., (2005), Is male pudding behavior of tropical butterflies targeted at sodium fornuptial gifts or activity? Published by Biological Journal of the Linsean Society. Pg.no 345-361.

Molleman, Freerk, Bas J. Zwaan, and Paul M. Brakefield. "The effect of male sodium diet and mating history on female reproduction in the puddling squinting bush brown Bicyclus anynana (Lepidoptera)." *Behavioral Ecology and Sociobiology* 56.4 (2004): 404-411.

Naikwdi N A et al., (2017), Diversity of butterflies from gardens and parks of Pune city published by International Journal of Reserches in Biosciences, Agriculture and Technology.Pg.no 350-356.

Parandhaman D et al., (2012), Diversity of butterflies in different habits from Tamilnadu part Western Ghats (Lepidoptera: Rhopalocera) published by Applied Biology.

Patil, Yogita, Rahul Patil, and Prakash Salunkhe. "Diversity and abundance of butterflies (:lepidoptera) in and around vita city, district sangli,(MS) india."

Ramírez-Restrepo, Lorena, Sandy Koi, and Ian MacGregor-Fors. "Tales of urban conservation: Eumaeus butterflies and their threatened cycad hostplants." *Urban ecosystems* 20.2 (2017): 375-378.

Sharmila, E. Joy, and A. Joesph Thatheyus. "Diversity of butterflies in Alagarhills, Tamil Nadu, South India." *Current Biotica* 6.4 (2013): 473-479.

Smedley, Scott R., and Thomas Eisner. "Sodium: a male moth's gift to its offspring." *Proceedings of the National Academy of Sciences* 93.2 (1996): 809-813.

Takcuchi Tsuyoshi (2017), Agonistic display or courtship behavior? A review of contests over mating opportunity in butterflies published by Journal Ethology.

Thakur Debapriya et al., (2017), Eco – ethology study of butterfly species found in set up garden in an Urban area, Kolkata, India published by Journal of Entomology and Zoology Studies. Pg.no 1900-1909.

Thuman Timothy J et al., (2017), Facultative pupal mating in *Heliconiuserato*: Implications formate choice, female preference, and speciation published by Ecology and Evolution. Pg.no

TipleAshish D et al., (2007), Butterfly diversity in relation to human-impact gradient on an Indian University Campus published by Nota lepidopterologica. Pg.no 179-188.

Verovnik, Rudi, et al. "Conserving Europe's most endangered butterfly: the Macedonian Grayling (Pseudochazara cingovskii)." *Journal of insect conservation* 17.5 (2013): 941-947.

.

Wiklund, C. "Courtship behaviour in relation to female monogamy in Leptidea sinapis (Lepidoptera)." *Oikos* (1977): 275-283.

# STUDY ON THE BUTTERFLY DIVERSITY OF THUMBOORMUZHI DAM GARDEN, THRISSUR, KERALA

Project submitted to the Research Department of Zoology, The American College in partial fulfillment of the requirements for the award of the Degree of

**Master of Science** in **Zoology**

by

**ARUNA MATHEW (18PGZ24)**

Under the Guidance & Supervision of

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**1881**

**POST GRADUATE RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE**

(AN AUTONOMOUS INSTITUTION AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)

(Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA – 3.46 on a 4 – point scale)

MADURAI, TN, INDIA

**MAY/JUNE 2020**

## DECLARATION BY CANDIDATE

I Aruna Mathew (18PGZ24) hereby declare that this dissertation entitled "**THE STUDY ON THE DIVERSITY OF THUMBOORMUZHI DAM GARDEN"** is my own original work under the guidance and supervision of **Mrs. Dr .E. Joy Sharmila MSc, MPhil, PhD ,** Associate professor, Post graduate and Research Department of Zoology, The American College, Madurai for the award of the **Degree of Master of Science in Zoology** by **Madurai Kamaraj University,** and this work has not been submitted elsewhere for the award of any degree, diploma, associate ship fellowship or other similar title.

Place: **Madurai** **Aruna Mathew**

**18PGZ24**

# CERTIFICATE

This is to certify that this dissertation entitled "**THE STUDY ON THE DIVERSITY OF THUMBOORMUZHI DAM GARDEN"** submitted by **Aruna Mathew** as a partial fulfillment for the degree of Master of Science in Zoology is based on the results of the project carried out by her under my guidance and supervision in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002. This dissertation has not been submitted elsewhere for any other degree.

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# HOST PREFERENCE OF BLOOD FEEDING MOSQUITO IN RELATION TO AVAILABILITY OF HUMAN AND DOMESTIC ANIMALS IN URBAN, SEMI-URBAN AND RURAL AREA

Dissertation submitted to The American College (Autonomous), Madurai, Affiliated to Madurai Kamaraj University in partial fulfilment of the Degree of Master of Science in Zoology

Submitted by

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**Madurai- 625002**

**April 2020**

## DECLARATION

I do hereby declare that this research work entitled “HOST PREFERENCE OF BLOOD FEEDING MOSQUITO IN RELATION TO HUMAN AND DOMESTIC ANIMAL IN URBAN, SEMI URBAN AND RURAL AREA” has been carried out by me and under the guidance of Dr. T. FEDRIC RAJKUMAR, at the Postgraduate and Research Department of Zoology, The American College, Madurai and I also declare that this work has not been submitted elsewhere for the award of any other degree.

Date- 2020

Madurai- 625002 (C.SABAREESH)

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## CERTIFICATE

This is to certify that the dissertation work entitled "HOST PREFERENCE OF BLOOD FEEDING MOSQUITO IN RELATION TO AVAILABILITY OF HUMAN AND DOMESTIC ANIMAL IN URBAN, SEMI-URBAN AND RURAL AREA" has been carried out by C.SABAREESH (18PGZ**17**) as partial fulfilment for the Degree of Master of Science under my guidance during the year 2019-2020 in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002.


Dr. T. Joseph Thatheyus,
Head of the Department,
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DR.T. Fedric Rajkumar,
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PG & ResearchDepartment ofZoology,
The American College,
Madurai- 625002

## ACKNOWLEDGEMENTS

I thank Almighty God who gave me knowledge and strength for the successful completion of this project work.

I am thankful to My Parents for their support and encouragement during the course of my project.

I also like to thank Dr.M. Davamani Christopher, Pricipal, The American College, Madurai for me an opportunity to carryout this research project.

I convey my sincere thanks to Dr.A. Joseph Thatheyus, Professor and PG Head of the Zoology Department for his support throughout the research work.

I wish to express my deep sense of gratitude and ineptness to my guide Dr. Fedric Rajkumar, for his inspiring guidance, constructive criticisms, helpful suggestions and constant encouragement which had to the successful completion of this work.

My special thanks to Dr.R.Paramasivan , ICMR – Vector Control and Research Centre, Madurai, for whole heartedly aided in identification of the mosquitoes and let me use the research facility of VCRC laboratory.

I thank lab assistants for providing the needed infrastructure in the laboratory during my project work.

# STUDY ON AVIFAUNAL DIVERSITY IN SELLUR KANMAI ANDARULDASSPURAM, MADURAI

Dissertation submitted to The American College, Madurai in partial fulfillment for the award of the Degree of Master of Science in Zoology

S.DHANALAKSHMI

(18PGZ03)

SINCE 1881

POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY

THE AMERICAN COLLEGE

(Re-Accredited with `A´ Grade by NAAC)

MADURAI -625002

April 2020

DECLARATION

I hereby declare that this dissertation entitled ``Study on Avian Diversity in Sellur kanmai and Aruldasspuram, Madurai´´ has been originally carried out by me under the guidance of Mr.M.Rajesh and this work has not been submitted elsewhere for the award of any other degree.

Madurai (S.DHANALAKSHMI)

April 2020 (18PGZ03)

CERTIFICATE

This is to certify that this dissertation entitled ``Study on Avian Diversity in Sellur kanmai and Aruldasspuram, Madurai´´ submitted by S.Dhanalakshmi (18PGZ03) during the year 2019-2020 as a partial fulfillment for the degree of Master Of Science in Zoology is based on the results of the project carried out by her under my guidance and supervision in the Postgraduate & Research Department of Zoology, The American College, Madurai-625002.


**Dr. A. Joseph Thatheyus**

Head of the Department

Associated professor,

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**Mr. M. Rajesh**

(Guide and Supervisor)

Assistant professor,

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The American College,

Madurai- 625002.


ACKNOWLEDGEMENTS

First and foremost I thank god Almighty for his showers of blessings bestowed on me throughout thesis study.

I thank **Dr. M. DavamaniChristober**, Principal & Secretary, The American College, Madurai for providing all the facilities needed for the completion of this work. I express my thanks to **Dr. A. Joseph Thatheyus**, Head PG & Research Department of Zoology, The American College, Madurai for his support.

I would like to thank my guide **Mr. M. Rajesh**, Assistant professor, PG & Research Department of Zoology, The American College, Madurai for his support, help and guidance.

I wish to express my profound gratitude to my beloved parents who have been constantly supporting and encouraging me always. I thank all my friends who directly and indirectly rendered help, support and encouragement throughout this project.

My special thanks to non teaching staffs, laboratory attended and juniors for their support to finish my work successfully.

# EPHEMEROPTERA, PLECOPTERA, AND TRICHOPTERA (EPT) COMPLEX AS INDICATOR FOR ECOLOGICAL QUALITY OF MANGALAMKOMBU STREAM (KODAIKANAL) WESTERN GHATS

Dissertation submitted to The American College in partial fulfilment of the

Degree of Master of Science in Zoology

**J. APURVA THANGAM**

**(ROLL No: 18PGZ02)**




**POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE**

**(Re-Accredited with 'A' Grade by NAAC)**

**MADURAI- 625002**

**MAY, 2020**

# DECLARATION

I do hereby declare that this research work entitled **"EPHEMEROPTERA, PLECOPTERA, AND TRICHOPTERA (EPT) COMPLEX AS INDICATOR FOR ECOLOGICAL QUALITY OF MANGALAMKOMBU STREAM (KODAIKANAL) WESTERN GHATS"** has been carried out by me under the guidance of **Dr.Sivaruban Thambiratnam**, at the Postgraduate and Research Department of Zoology, The American College, Madurai and I also declare that this work has not been submitted elsewhere for the award of any other degree.

May- 2020,

Madurai–625002**.** **(**J.APURVA THANGAM)

# CERTIFICATE

This is to certify that the dissertation work entitled **"EPHEMEROPTERE, PLECOPTERA, AND TRICHOPTERA (EPT) COMPLEX INDICATOR FOR ECOLOGICAL QUALITY OF MANGALAMKOMBU STREAM (KODAIKANAL) WESTERN GHATS" has** been carried out by **J. Apurva Thangam** (**18PGZ02**) as partial fulfilment for the Degree of Master of Science under my guidance during the year 2017- 2018 in the Postgraduate and Research Department of Zoology, The American college, Madurai-625002.

**Dr. A. Joseph Thatheyus,**
**Head of the Department,**
**PG and Research Department of zoology**
**The American College,**
**Madurai- 625002.**

**Dr. Sivaruban Thambiratnam**
**(Guide)**

## ACKNOWLEDGEMENTS

I am very much thankful to **my parents and family** for their support and encouragement during the course of my project work.

I convey my sincere and heartfelt thanks to **Dr.A.Joseph Thatheyus**, Head, PG Department of Zoology, for providing all necessary facilities which enabled us to complete project work.

This is a great pleasure to express my sincere gratitude and thanks to **Dr.Sivaruban Thambiratnam**, my guide for his ideas, effective support and continued encouragement which enabled for successful completion of this project.

Special thanks to our professors for their kindly help in completing this project.

I thank my uncle **T.R.Ravindran** for granting and helping me in my project work at his coffee estate.

I thank lab assistants for providing the needed infrastructure in the laboratory and rendering the help during the course of my project work.

I thank **P.Srinivasan, R.Isack, S.Susaritha** Research Scholars who have been encouraging me throughout the project and it is my responsible to thank **all my friends** for their help and making this project a successful one.

# SURVEILLANCE OF TICKS FROM ARULDHASPURAM AND VADAPAZHANJI AREAS IN MADURAI CITY, TAMIL NADU

A Dissertation submitted to The American College, Madurai in partial fulfillment of the requirements for the degree of **Master of Science in Zoology**


Submitted by

**S. KARTHIGA**

**(18PGZ09)**


SINCE 1881


**Postgraduate and Research Department of**

**Zoology The American College**

**Madurai – 625 002**


**April 2020**

Edit with WPS Office

## DECLARATION

I hereby declare that this dissertation work entitled**, "Surveillance of ticks from Aruldhaspuram and Vadapazhanji areas in Madurai city, Tamil Nadu"** has been carried out by me under the guidance of **Mr. K. J. Dhananjeyan,** Assistant Professor, PG & Research Department of Zoology and this has not submitted elsewhere for the award of any other degree.

Madurai – 02 (S. KARTHIGA)



Edit with WPS Office

## CERTIFICATE

This is to certify that this dissertation entitled, **"Surveillance of ticks from Aruldhaspuram and Vadapazhanji areas of Madurai city, Tamil Nadu"** has been carried out by **Karthiga. S (18PGZ09)** during the year 2019-2020 in the PG & Research Department of Zoology, The American College, Madurai.

**Dr. A. Joseph Thatheyus**
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**Mr. K. J. Dhananjeyan**
Assistant Professor
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The American College
Madurai.



Edit with WPS Office

## ACKNOWLDGEMENT

Firstly, I would like to thank my parents for their blessings and support for me to finish this work.

I express my sincere thanks to **Dr. M. Davamani Christober**, Principal & Secretary, The American College, Madurai for providing the necessary laboratory facilities.

I express my sincere gratitude to **Dr. A. Joseph Thatheyus** Head of the Department for providing all necessary facilities which enabled me to complete the work.

I would like to express my sincere gratitude to **Dr. R. Paramasivan,** Scientist F & Officer-in- Charge, Vector Control Research Centre (Field Station), (ICMR), Madurai for allowing to use their laboratory facility and for his constant words of wisdom and encouragement.

I would like to extend my sincere thanks to **Mr. A. Veerapathiran,** Senior Technical Officer, Vector Control Research Centre (Field Station), (ICMR), Madurai for his great support in identifying the tick specimens.

I would like to express my personal indebtedness and gratefulness to my research guide, **Mr. K. J. Dhananjeyan**, The American College (Autonomous), Madurai, for is constant encouragement, free hand approach and valuable guidance throughout the work.

I thank my friends **Miss. S. Dhanalakshmi** and **Mr. N. Shak Abdulla** who had been encouraging me throughout the project work and it is my responsibility to thank my friends for their help and making this project a successful one.

S.KARTHIGA





Edit with WPS Office

Edit with WPS Office

# DIVERSITY, HABITATASSOCIATIONAND COMPARATIVE STUDY ON BUTTERFLIES IN DIFFERENT ZONES IN VALAYANKULAM VILLAGE, MADURAI DISTRICT, TAMIL NADU

**Dissertation submitted to The American College (Autonomous) affiliated to Madurai Kamaraj University in partial fulfillment for the award of the Degree of Master of Science in Zoology.**


## S.KETZIAL
**(Roll No. 18PGZ10)**






**POST GRADUATE & RESEARCH DEPARTMENT OF ZOOLOGY**
**THE AMERICAN COLLEGE**
Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA 3.46 on a 4 point scale
Madurai – 625002

June 2020

# DECLARATION

I hereby declare that this project titled **'DIVERSITY, HABITAT ASSOCIATION AND COMPARATIVE STUDY OF BUTTERFLIES IN DIFFERENT ZONES IN VALAYANKULAM VILLAGE, MADURAI DISTRICT'** has been originally done under the guidance of Mr. A. David Antony Raj, Assistant professor, Department of Zoology, The American College, Madurai in partial fulfillment for the degree of Master Of Science in Zoology and this work has not been submitted elsewhere for any other degree.

**STATION:** Madurai**PROJECT STUDENT**

**DATE:** 07.06.2020

S.KETZIAL (18PGZ10)

## CERTIFICATE

This is to certify that this project titled **"DIVERSITY, HABITAT ASSOCIATION AND COMPARATIVE STUDY ON BUTTERFLIES IN DIFFERENT ZONES IN VALAYANKULAM VILLAGA, MADURAI DISTRICT"** is certified and bonafide work of S.Ketzial in partial fulfillment for the degree of Master of Science in Zoology carried out by her under my guidance and supervision in the Department of Zoology, The American College, Madurai-2 in the academic year 2019-2020.

**HEAD OF THE DEPARTMENT**

**Dr. A. Joseph Thatheyus**
Associate Professor& Head
PG & Research Department of Zoology
The American College
Madurai

**PROJECT GUIDE**

A. David Antony Raj
Associate Professor
PG& Research Department of Zoology
The American College
Madurai

## ACKNOWLEDGEMENT

- I wholeheartedly thank Jesus Christ for his Grace bestowed upon me throughout this project.

- I extend my sincere gratitude to my principal Dr. M. Davamani Christopher, who gave me an opportunity to do this project.

- I am grateful to my institution The American College which gave me this project wherein I learnt so many things and my sincere thanks to the coordinators of this project
.
- I am also thankful to my Head of the Department Dr. A. Joseph Thatheyus, for the support given.

- I am highly obliged to my project guide, Mr. A. David Antony Raj, professor of Department of Zoology, for his guidance in completing this project.

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- I would also like to thank my community people who cooperated well during the awareness program.

**Biochemical changes in the fish Catla catla after exposure of Mercury**

**A DISSERTATION TO THE AMERICAN COLLEGE (AUTONOMOUS) AFFILIATED TO MADURAI KAMARAJ UNIVERSITY IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF THE DEGREE OF**

**Master of Science in Zoology**

**By**

**K.LAKSHMANAN, Roll. No. 18PGZ23**

**POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re accredited (2nd cycle) by NAAC with Grade 'A' CGPA – 3.46 on a 4 –point scale)**

**MADURAI**

**SEPTEMBER 2020**



**CERTIFICATE**

**This is to be certify that the dissertation entitled, "Biochemical changes in the fish Catla catla after chronic exposure of Mercury" submitted by Mr. K.LAKSHMANAN, (Roll. No. 18PGZ23) is a record of bonofide research work carried out by him under my guidance and supervision during the period 2019-2020 for the partial fulfillment of the Degree of Master of Science in Zoology at The American College (Autonomous), Madurai. I further certify that this dissertation or of it has not been submitted elsewhere for any other degree or diploma or certificate course.**

**DR. J. JOSEPH THATHEYUS,**
**Associate Professor and Head,**
**Research Department of Zoology,**
**Zoology, The American College (Autonomous),**
**(Autonomous), Madurai - 625 002.**

**Dr. P.DAILIAH ROOPHA,**
**Assistant Professor, PG &**
**PG & Research Department of**
**The American College**
**Madurai - 625 002.**

**PLACE: Madurai** **DATE:**



**DECLARATION**

**I hereby declare that the dissertation entitled "Biochemical changes in the fish Catla catla after**

**chronic exposure of Mercury" has been originally carried out by myself, under the guidance of**

**Dr. P. Dailiah Roopha, M.Sc., M.Phil., Ph.D., Assistant Professor in Post Graduate and**

**Research Department of Zoology, The American College (Autonomous), Madurai in partial**

**fulfillment for the degree of Master of Science in Zoology during the Academic year 2019-2020**

**and this work has not been submitted elsewhere for the award of any other degree or diploma or**

**certificate course.**

**PLACE: Madurai**
**(K.LAKSHMANAN)**

**DATE:**



**ACKNOWLEDGEMENT**

**My grateful thanks are due to Dr. M. Davamani Christober., Principal and Secretary, The American College (Autonomous), Madurai, for giving me an opportunity, to complete my M.Sc., degree course in this college.**

**I am also grateful to Dr. J. Joseph Thatheyus, Head, Post Graduate and Research Department of Zoology, The American College (Autonomous), for his support.**

**With deep sense of respect, I would like to express my thanks to Dr. E. Joy Sharmila, Head, Under Graduate Department of Zoology, The American College (Autonomous), for her encouragement.**

**I would like to take opportunity to express my humble gratitude to Dr. P. Dailiah Roopha, M.Sc., M.Phil., Ph.D., Assistant Professor, Post Graduate and Research Department of Zoology, The American College (Autonomous), for her**

**constant guidance and willingness to share her vast knowledge made me understand this project and its manifestations in great depths and helped us to complete the assigned tasks.**

**I am obliged to all staff members of Post Graduate and Research Department of Zoology, The American College (Autonomous), for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my assignment.**

**I also express my thanks to my Family Members love and care.**

**I wish to express my hearty thanks to my classmates, for their advice due to which I was able to complete the course successfully and present the dissertation work with confidence.**

**(K.LAKSHMANAN)**

# STUDIES ON THE DIVERSITY OF BUTTERFLIES AND DBIRDS AT SACRED HEART COLLEGE CAMPUS IN KODAIKANAL

A Dissertation submitted to The American College in Partial fulfillment of the requirements for the degree of **Master of Science in Zoology**


Submitted by

**J.MALAVIKA**

**(18PGZ25)**






**Postgraduate &Research Department of Zoology**

**The American College**

**Madurai – 625 002**


**April 2020**

## DECLARATION

I hereby declare that this dissertation work entitled**, "Studies on Diversity of Butterflies and Birds at Sacred Heart College Campus in Kodaikanal ",** has been carried out by me under the guidance of **Dr. A. Joseph Thatheyus,** Head of the Department, PG& Research and Department of Zoology and this has not submitted elsewhere for the award of any other degree.

Madurai – 02

(MALAVIKA)
18PGZ25

## CERTIFICATE

This is to certify that this dissertation entitled**, "Studies on Diversity of Butterflies and Birds at Sacred Heart College Campus in Kodaikanal "** has been submitted by **MALAVIKA J (18PGZ25)** during the year 2019-2020 in the PG and Research Department of Zoology, **The American College, Madurai.**

**Dr. A. Joseph Thatheyus** **Dr. A.Joseph Thatheyus**

HeadGuide

PG& Research Department of Zoology PG& Research Department of Zoology

The American College The American College

Madurai Madurai

## ACKNOWLDGEMENT

Firstly, I would like to thank **my parents** for their blessings and support for me to finish this work.

I would like to express my personal indebtedness and gratefulness to my research guide, **Dr. A. Joseph Thatheyus**, Head, PG& Research Department of Zoology, The American College (Autonomous), Madurai, for is constant encouragement, free hand approach and valuable guidance throughout the work.

I express my sincere thanks to **Dr. M. Davamani Christober**, Principal, The American College, and Madurai for providing the necessary laboratory facilities.

**J.MALAVIKA**

# PREVALENCE OF LYMPHATIC FILARIASIS IN WEST MADURAI

## AN EPIDIMIOLOGICAL STUDY

Dissertation submitted to The American College, Madurai in partial fulfillment for the award of the Degree of Master of Science Zoology

P.MANIKANDAN

(18PGZ12)

SINCE 1881

POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY

THE AMERICAN COLLEGE

(Re-Accredited with ` A 'Grade by NAAC)

MADURAI -625002

April 2020

# DECLARATION

I hereby declare that this dissertation entitled ``Prevalence of lymphatic filariasis in west Madurai: an epidemiological study" has been carried out by me under the guidance of Dr. T. FREDRICK RAJKUMAR and this work has not been submitted elsewhere for the award of any other degree.

Madurai (P.MANIKANDAN)

April 2020

# CERTIFICATE

This is to certify that this dissertation entitled ``PREVALENCE OF LYMPHATIC FILARIASIS IN WEST MADURAI: AN EPIDIMIOLOGICAL STUDY" submitted by P.MANIKANDAN (18PGZ12) as a partial fulfillment for the degree of Master Of Science in Zoology is based on the results of the project carried out by him under my guidance and supervision in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002.


**Dr. A. Joseph Thatheyus**

Head of the Department

Associated professor,

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The American College,

Madurai-625002.

**Dr. T. FREDRICK RAJKUMAR**

(Guide and Supervisor)

Assistant professor,

PG & Research Department of Zoology,

The American College,

Madurai-625002.

# Acknowledgments

First and foremost I thank god Almighty for his showers of blessings bestowed on me throughout thesis study.

I thank **Dr. M. Davamani Christober**, Principal & Secretary, The American College, Madurai for providing all the facilities needed for the completion of this work. I express my thanks to **Dr. A. Joseph Thatheyus**, Head PG & Research Department of Zoology, The American College, Madurai for his support.

I would like to thank my guide **Dr. T. FREDRICK RAJKUMAR**, Assistant professor, PG & Research Department of Zoology, The American College, Madurai for his support, help and guidance.

I wish to express my profound gratitude to my beloved parents who have been constantly supporting and encouraging me always.

My special thanks to My friends and juniors for their support to finish my work successfully.

# STUDY OF ALPHA AND BETA HAEMOLYTIC BACTERIA USING BACTERIAL STRAINS CAUSING

# URINARY TRACT INFECTION

Dissertation submitted to The American College, Madurai in partial fulfillment for award of the Degree of Master of Science Zoology

R.PAVITHRA

(18PGZ14)

SINCE 1881

POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY

THE AMERICAN COLLEGE

(Re-Accredited with ` A ‘Grade by NAAC)

MADURAI -625002

April 2020

***

## DECLARATION

I here declare that is dissertation entitled "**Study of Alpha and Beta and haemolytic bacteria using bacterial strains causing urinary tract infection,-The American College-Madurai"** has been carried out by **Dr. P. Velladurai,** Assistant Professor, P.G Department of Zoologymeunder the guidance of and this work has not been submitted elsewhere for the award of any other degree.

Madurai — R. Pavithra

April 2020 — 18PGZ14

## CERTIFICATE

This is to certify that this dissertation entitled "**Study of Alpha and Beta Haemolytic Bacteria Using Bacterial Strains Causing Urinary Tract Infection, The American College Madurai"**submitted by **R.Pavithra(18PGZ14)** as a partial fulfillment for the degree of master science in Zoology is based on the results of the project carried out by her under my guidance and supervision in the postgraduate and Research Department of Zoology-The American College, Madurai-625002.

Dr. A. Joseph Thatheyus
Head of the Department
Associated Professor
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The American College
Madurai-625002

Dr.P. Velladurai
Assistant Professor

P.G and Research Department of Zoology

The American College
Madurai-625002

"

**ACKNOWLEDGEMENTS**

First and fore most I thank god Almighty for his of blessing bestowed on me throughout thesis study.

I thank **Dr. M.DavamaniChristober,** Principal and Secretary, The American College Madurai, for providing all the facilities needed for the completion of this work. II express my thank to**Dr.A.Joseph Thatheyus,** Head of PG & Research Department of Zoology, The American College Madurai, for this support.

I would like to thank my guide**Dr.P.Velladurai,** Assistant professor, PG& Research Department of Zoology, The American College Madurai, for his support, help and guidance.

I wish to express my profound gratitude to my beloved parents who have been constantly supporting and encouraging me always.

My special thanks to my brother Ganapathi .S and my friends and juniors for their support to finish my work successfully.

# Protective role of *Spirulina fusiformis* against a toxicity effect of mercury on *Tilapia* (*Oreochromis niloticus) fish*

A DISSERTATION TO THE AMERICAN COLLEGE (AUTONOMOUS)
AFFILIATED TO MADURAI KAMARAJ UNIVERSITY
IN PARTIAL FULFILLMENT OF REQUIREMENTS
FOR THE AWARD OF THE DEGREE OF

*Master of Science in Zoology*

By

**S.GOWSALYA DEVI,**
**Roll. No. 18PGZ04**

SINCE 1881

**POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re accredited (2nd cycle) by NAAC with Grade 'A' CGPA – 3.46 on a 4 –point scale)**

**MADURAI**

**SEPTEMBER 2020**

# CERTIFICATE

This is to be certify that the dissertation entitled, **"Protective role of *Spirulina fusiformis* against a toxicity effect of mercury on *Tilapia* (*Oreochromis niloticus*) fish"** submitted by Mr. S.GOWSALYA DEVI, (Roll. No. 18PGZ04) is a record of bonofide research work carried out by her under my guidance and supervision during the period 2019-2020 for the partial fulfillment of the Degree of Master of Science in Zoology at The American College (Autonomous), Madurai. I further certify that this dissertation or of it has not been submitted elsewhere for any other degree or diploma or certificate course.

**DR. J. JOSEPH THATHEYUS,**
Associate Professor and Head,
PG & Research Department of Zoology,
The American College (Autonomous),
Madurai - 625 002.

**Dr. P.DAILIAH ROOPHA,**
Assistant Professor,
PG & Research Department of Zoology,
The American College (Autonomous),
Madurai - 625 002.

PLACE: Madurai
DATE:

# DECLARATION

I hereby declare that the dissertation entitled **"Protective role of *Spirulina fusiformis* against a toxicity effect of mercury on *Tilapia* (*Oreochromis niloticus*) *fish"*** has been originally carried out by myself, under the guidance of **Dr. P. Dailiah Roopha, M.Sc., M.Phil., Ph.D.,** Assistant Professor in Post Graduate and Research Department of Zoology, The American College (Autonomous), Madurai in partial fulfillment for the degree of Master of Science in Zoology during the Academic year 2019-2020 and this work has not been submitted elsewhere for the award of any other degree or diploma or certificate course.

PLACE: Madurai (**S.GOWSALYA DEVI**)

DATE:

# ACKNOWLEDGEMENT

I thank to **God Almighty**, for giving the wisdom, strength, support and knowledge in exploring things; for the guidance is helping surpass all the trials that the researchers encountered and for giving determination to pursue their studies and to make this study possible.

My grateful thanks are due to **Dr. M. Davamani Christober.,** Principal and Secretary, The American College (Autonomous), Madurai, for giving me an opportunity, to complete my M.Sc., degree course in this college.

I am also grateful to **Dr. J. Joseph Thatheyus,** Head, Post Graduate and Research Department of Zoology, The American College (Autonomous), for his support.

With deep sense of respect, I would like to express my thanks to **Dr. E. Joy Sharmila,** Head, Under Graduate Department of Zoology, The American College (Autonomous), for her encouragement.

I would like to take opportunity to express my humble gratitude to **Dr. P. Dailiah Roopha, M.Sc., M.Phil., Ph.D.,** Assistant Professor, Post Graduate and Research Department of Zoology, The American College (Autonomous), for her constant guidance and willingness to share her vast knowledge made me understand this project and its manifestations in great depths and helped us to complete the assigned tasks.

I am obliged to **all staff members** of Post Graduate and Research Department of Zoology, The American College (Autonomous), for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my assignment.

I also express my thanks to my **Family Members**, for their prayers, love and care.

I wish to express my hearty thanks to my classmates, for their advice due to which I was able to complete the course successfully and present the dissertation work with confidence.

(S.GOWSALYA DEVI)

# STUDIES ON THE INFLUENCE OF ARTIFICIAL FISH FEEDS ON THE GROWTH OF THE FINGERLINGS OF THE SPOTTED TILAPIA, *PELMATOLAPIA MARIAE*

A Dissertation submitted to The American College in Partial fulfillment of the requirements for the degree of **Master of Science in Zoology**


Submitted by

**N. SHAK ABDULLA**

**(18PGZ26)**






**Postgraduate & Research Department of Zoology**

**The American College**

**Madurai – 625 002**


**April 2020**

## DECLARATION

I hereby declare that this dissertation work entitled**, "Studies on the influence of artificial feeds on the growth of the fingerlings of the Spotted Tilapia, *Pelmatolapia mariae*",** has been carried out by me under the guidance of **Dr. A. Joseph Thatheyus,** Head, PG & Research and Department of Zoology and this has not submitted elsewhere for the award of any other degree.

Madurai – 02 (SHAK ABDULLA)

## CERTIFICATE

This is to certify that this dissertation entitled**, Studies on the influence of artificial feeds on the growth of the fingerlings of the Spotted Tilapia, *Pelmatolapia mariae,*** has been submitted by **Shak Abdulla.N (18PGZ26)** during the year 2019-2020 in the PG & Research Department of Zoology, **The American College, Madurai.**

**Dr. A. Joseph Thatheyus**

Head

PG & Research Department of Zoology

The American College

Madurai

**Dr. A.Joseph Thatheyus**

Guide

PG & Research Department of Zoology

The American College

Madurai

## ACKNOWLDGEMENT

Firstly, I would like to thank **my parents** for their blessings and support for me to finish this work.

I would like to express my personal indebtedness and gratefulness to my research guide, **Dr. A. Joseph Thatheyus**, Head, PG & Research Department of Zoology, The American College (Autonomous), Madurai, for is constant encouragement, free hand approach and valuable guidance throughout the work.

I thank **D. Vigneshkumar, K. Lakshmanan, S. Karthiga, and J. Apurva Thangam** who had been encouraging me throughout the project and it is my responsibility to thank **all my friends** for their help and making this project a successful one.

I express my sincere thanks to **Dr. M. DavamaniChristober**, Principal, The American College, Madurai for providing the necessary laboratory facilities.

**N. SHAK ABDULLA**

# DIVERSITY AND DISTRIBUTION OF EPHEMEROPTERA, PLECOPTERA AND TRICOPTERA (EPT) IN STREAMS OF AYYANAAR FALLS, SOUTHERN EASTERN GHATS

Dissertation submitted to The American College (Autonomous), Madurai, Affiliated to Madurai Kamaraj University in partial fulfilment of the Degree of Master of Science in Zoology


Submitted by

**T. KIRUTHIKA**

**(18PGZ11)**

Under the guidance of

**Dr. SIVARUBAN THAMBIRATNAM, M.Sc., M.Phil., Ph.D.**






**Post Graduate and Research Department of Zoology**

**The American College (Autonomous)**

**(Re-Accredited with 'A' Grade by NAAC)**

**Madurai- 625002**


**April 2020**

## DECLARATION

I do hereby declare that this research work entitled “DIVERSITY AND DISTRIBUTION OF EPHEMEROPTERA, PLECOPTERA AND TRICOPTERA IN STREAMS OF AYYANAAR FALLS, SOUTHERN EASTERN GHATS” has been carried out by me and under the guidance of Dr. Sivaruban Thambiratnam, at the Postgraduate and Research Department of Zoology, The American College, Madurai and I also declare that this work has not been submitted elsewhere for the award of any other degree.

Date- 2020

Madurai- 625002 (T. KIRUTHIKA)

# CERTIFICATE

This is to certify that the dissertation work entitled “DIVERSITY AND DISTRIBUTION OF EPHEMEROPTERA, PLECOPTERA AND TRICOPTERA(EPT) IN STREAMS OF AYYANAAR FALLS, SOUTHERN EASTERN GHATS” has been carried out by T.KIRUTHIKA (18PGZ11) as partial fulfilment for the Degree of Master of Science under my guidance during the year 2019-2020 in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002.


Dr. T. Joseph Thatheyus,
Head of the Department,
PG & Research Department of Zoology,
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Madurai- 625002

Dr. Sivaruban Thambiratnam,
Assistant Professor,
PG & ResearchDepartment ofZoology,
The American College,
Madurai- 625002

## ACKNOWLEDGEMENTS

I thank Almighty God who gave me knowledge and strength for the successful completion of this project work.

I am thankful to My Parents for their support and encouragement during the course of my project.

I also like to thank Dr.M. Davamani Christopher, Principal, The American College, Madurai for me an opportunity to carry out this research project.

I convey my sincere thanks to Dr .A. Joseph Thatheyus, Professor and PG Head of the Zoology Department for his support throughout the research work.

I wish to express my deep sense of gratitude to my guide Dr. Sivaruban Thambiratnam, for his inspiring guidance, constructive criticisms, helpful suggestions and constant encouragement which had to the successful completion of this work.

I thank lab assistants for providing the needed infrastructure in the laboratory during my project work.

**ISOLATION AND CHARACTERIZATION OF ENDOPHYTIC MICROORGANISM FROM *Halymenia venusta* (RED ALGAE) AND *Spatoglossum marginatum* (BROWN ALGAE)**

A dissertation submitted to The American college (Autonomous) in the partial fulfilment of the degree of **Master of science in Zoology**

Submitted by

**D.VIKNESHKUMAR**

**(18PGZ21)**



**POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE**

**MADURAI - 625002**

**APRIL 2020**

*DEDICATED*

*TO*

*My Parents*

*My Sister & Brother*

*My Friends*



**DECLARATION**

I hereby declare that the project entitled "**Isolation and Characterization of Endophytic Microorganism from *Halymenia venusta* (Red algae) and *Spatoglossum marginatam* (Brown algae)"** has been originally carried out by me under the supervision of **Mrs. J. Stella Mary, M.Sc., M.Phil., (Ph.D)** Assistant Professor, Post Graduate & Research Department of Zoology and I assure that this work has not been submitted elsewhere for the award of any other degree.

Date: (D. VIKNESHKUMAR)

Place:

**CERTIFICATE**

This is to certify that this project thesis entitled "**Isolation and Characterization of Endophytic Microorganism from *Halymenia venusta* (Red algae) and *Spatoglossum marginatam* (Brown algae)"** is a bonafide work done by **VIKNESHKUMAR.D (18PGZ21)** during the year 2019-2020 submitted in partial fulfilment for the Degree of Master of Science in Zoology is based on the results of the experiments carried out in the Post Graduate Department of Zoology, The American College, Madurai. This dissertation has not been submitted elsewhere for any other degree.

**Dr. A. Joseph Thatheyus** **Mrs. J.Stella Mary**

Head of the Department

PG & Research Department of Zoology

The American College,

Madurai-625 002.

Research Guide,

PG & Research Department of Zoology

The American College,

Madurai-625 002.



**ACKNOWLEGEMENTS**

I acknowledgement that it is by the Grace of God and his presence, I was able to complete this work.

I own thanks to **Dr. A. Joseph Thatheyus, M.Sc., M.Phil. Ph.D,** Head, PG and Research Department of Zoology, The American College, Madurai.

I express me deep sense of gratefulness to my guide **Mrs.J.Stella Mary, M.Sc., M.Phil., (Ph.D)** Assistant Professor, PG Department of Zoology for her invaluable guidance, encouragement and suggestion throughout the completion of this work.

I sincerely thank all faculties, Department of Zoology for their suggestion and encouragement during the project

My special thanks **my parents Mr. B. Dharmaraj , Mrs . D .Rathiga** for their care and support on the my project work.

My special thanks to the my friends **E. Kanimozhi, N**. **Shak Abdulla, K.Lakshmanan and S. Gowsalyadevi** for their time helping and support on my project work .I am very much thankful to **my all friends**.

D. Vikneshkumar

# AVIAN DIVERSITY IN THE OUTSKIRTS OF SIVAKASI, VIRUDHUNAGAR DISTRICT (2019-2020)

A Dissertation submitted to The American College affiliated to Madurai Kamaraj University in partial fulfillment of the requirement for the degree of

**Master of Science in Zoology**


## A.PRIYADARSHINI

## 18PGZ15

**POSTGRADUATE & RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE (Autonomous)**

**Re-Accredited (2nd cycle) by NAAC with Grade 'A' CGPA -3.46 on a 4 point scale**

**MADURAI – 625002**


**April 2020**

# CERTIFICATE

This is to certify that this dissertation entitled "**Avian diversity in the outskirts of Sivakasi, Virudhunagar district, Tamil nadu, India"** submitted by **Ms. A. Priyadarshini (18PGZ15)** in a partial fulfillment for the degree of Master of Science in Zoology has been carried out by her during the year 2019-2020 in the Post Graduate & Research Department of Zoology, The American college, Madurai. This dissertation has not been submitted elsewhere for any other degree.


**Dr.A.Joseph Thateyus**
Head of the Department
PG & Research Department of Zoology
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Madurai

**Mr.M.Rajesh**
Assistant Professor
PG & Research Department of Zoology
The American College (Autonomous)
Madurai

# DECLARATION

I hereby declare that the thesis entitled **"Avian diversity in the outskirts of Sivakasi, Virudhunagar district, Tamil Nadu, India"** submitted by me for the degree of **Master of Science in Zoology** is the result of my original and independent research work carried out by me under the guidance of **Mr. M. Rajesh**, Assistant Professor, PG & Research Department of Zoology, The American College, Madurai-2 and it has not been submitted for the award of any degree/ diploma/ fellowship of any University or Institution.

Place: Madurai Ms. A. Priyadarshini

Date:

# ACKNOWLEDGEMENT

I wish to thank the **God** almighty for his grace upon me and his blessings which has made me to complete my project.

I want to express my sincere gratitude to **DR.M.DAVAMANI CHRISTOBER**, Principal, The American College, Madurai for his allowance on my project.

I owe my deepest gratitude to my parents, **J.ARAVINDAN PRAKASH-A.KAVITHA**. I am grateful to them, whose foresight, encouragement and support paved the way for a privileged education.

I express my heartfelt gratitude to **Dr.A.JOSEPH THATHEYUS**, Head of the department, PG & Research Department of Zoology.

I am extremely grateful and thankful to **Prof. M.RAJESH**, my guide for supporting this topic, his invaluable guidance, keen academic interest, his motivation and constant encouragement throughout this project.

My heartfelt thanks to my dear **FRIENDS**, who made my surrounding a convivial place to work. Their support in this effort is, however, greatly appreciated for completion of my project to great success.

I would like to thank my **loved ones**, who have supported me throughout the entire process, both by keeping me harmonious and helping me putting peace together.

I owe everything to them. Besides this, several people have knowingly and unknowingly assisted me in the successful completion of my project.

# STUDY ON THE ECO-ETHOLOGY OF BUTTERFLIES IN THE BUTTERFLY GARDEN. THE AMERICAN COLLEGE

Dissertation submitted to The American College, Madurai in partial fulfillment for award of the Degree of Master of Science Zoology

K. ABIRAMI

(18PGZ01)

SINCE 1881

POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY

THE AMERICAN COLLEGE

(Re-Accredited with ` A 'Grade by NAAC)

MADURAI -625002

April 2020

***

# DECLARATION

I hereby declare that this dissertation entitled "**Study on the Eco-Ethology of Butterflies in the Butterfly Garden. The American College- Madurai**" has been carried out by **Dr. E. Joy Sharmila,** Head Of the Department, Assistant professor, U.G Department Of Zoology me under the guidance of and this work has not been submitted elsewhere for the award of any other degree.

Madurai

April 2020 Signature of candidate

# CERTIFICATE

This is to certify that this dissertation entitled ``**Study on the Eco-Ethology of Butterflies in the Butterfly garden. The American College Madurai,"** submitted by K.ABIRAMI (18PGZ01) as a partial fulfillment for the degree of Master of Science in Zoology is based on the results of the project carried out by her under my guidance and supervision in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002.


**Dr. A. Joseph Thatheyus**

Head of the Department

Associated professor

PG & Research Department of Zoology

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Madurai-625002

**Dr. E. Joy Sharmila**

Head of the Department

Assistant professor

U.G Department of Zoology

The American College

Madurai-625002

# ACKNOWLEDGEMENT

First and fore most I thank god Almighty for his showers of blessings bestowed on me throughout thesis study.

I thank **Dr. M. Davamani Christober**, Principal and Secretary, The American College, Madurai for providing all the facilities needed for the completion of this work. I express my thanks to **Dr. A. Joseph Thatheyus**, Head PG & Research Department of Zoology, The American College, Madurai for his support.

I would like to thank my guide **Dr. E. Joy Sharmila**, Assistant professor, U.G Department of Zoology, The American College, Madurai for his support, help and guidance.

I wish to express my profound gratitude to my beloved parents who have been constantly supporting and encouraging me always.

My special thanks to my friends and juniors for their support to finish my work successfully.

# STUDY ON THE BUTTERFLY DIVERSITY OF THUMBOORMUZHI DAM GARDEN, THRISSUR, KERALA

Project submitted to the Research Department of Zoology, The American College in partial fulfillment of the requirements for the award of the Degree of

**Master of Science** in **Zoology**

by

**ARUNA MATHEW (18PGZ24)**

Under the Guidance & Supervision of

**Dr. E. Joy Sharmila,** M.sc, MPhil, PhD**.**

Assistant Professor

Postgraduate and Research Department of Zoology

The American College, Madurai

**1881**

**POST GRADUATE RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE**

(AN AUTONOMOUS INSTITUTION AFFILIATED TO MADURAI KAMARAJ UNIVERSITY)

(Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA – 3.46 on a 4 – point scale)

MADURAI, TN, INDIA

**MAY/JUNE 2020**

## DECLARATION BY CANDIDATE

I Aruna Mathew (18PGZ24) hereby declare that this dissertation entitled "**THE STUDY ON THE DIVERSITY OF THUMBOORMUZHI DAM GARDEN"** is my own original work under the guidance and supervision of **Mrs. Dr .E. Joy Sharmila MSc, MPhil, PhD ,** Associate professor, Post graduate and Research Department of Zoology, The American College, Madurai for the award of the **Degree of Master of Science in Zoology** by **Madurai Kamaraj University,** and this work has not been submitted elsewhere for the award of any degree, diploma, associate ship fellowship or other similar title.

Place: **Madurai** **Aruna Mathew**

**18PGZ24**

# CERTIFICATE

This is to certify that this dissertation entitled "**THE STUDY ON THE DIVERSITY OF THUMBOORMUZHI DAM GARDEN"** submitted by **Aruna Mathew** as a partial fulfillment for the degree of Master of Science in Zoology is based on the results of the project carried out by her under my guidance and supervision in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002. This dissertation has not been submitted elsewhere for any other degree.

Dr. A. Joseph Thatheyus
Head & Associate Professor
Post graduate and Research Department of Zoology
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Dr. E. Joy Sharmila
Head of UG & Assistant Professor
Post graduate and Research Department of Zoology
The American College
Madurai 625 002

# AKNOWLEDGEMENT

I wish to express my profound gratitude to my project guide Mrs. Dr. E. Joy Sharmila for his invaluable guidance, immense help, suggestions, constant encouragement and providing me necessary facilities throughout this project.

I convey my immense thanks to Dr. A. Joseph Thatheyus, Head of the PG & Research Department of Zoology, for his kind encouragement and providing facilities throughout the project.

It is my privilege and pleasure to thank my dear parents for their prayers and blessings which enabled me to complete this work successfully. My heartful thanks to all my dear friends for their support in completion of my research work.

# HOST PREFERENCE OF BLOOD FEEDING MOSQUITO IN RELATION TO AVAILABILITY OF HUMAN AND DOMESTIC ANIMALS IN URBAN, SEMI-URBAN AND RURAL AREA

Dissertation submitted to The American College (Autonomous), Madurai, Affiliated to Madurai Kamaraj University in partial fulfilment of the Degree of Master of Science in Zoology

Submitted by

**SABAREESH C**

**(18PGZ17)**

SINCE 1881

**Post Graduate and Research Department of Zoology**

**The American College (Autonomous)**

**(Re-Accredited with 'A' Grade by NAAC)**

**Madurai- 625002**

**April 2020**

## DECLARATION

I do hereby declare that this research work entitled “HOST PREFERENCE OF BLOOD FEEDING MOSQUITO IN RELATION TO HUMAN AND DOMESTIC ANIMAL IN URBAN, SEMI URBAN AND RURAL AREA” has been carried out by me and under the guidance of Dr. T. FEDRIC RAJKUMAR, at the Postgraduate and Research Department of Zoology, The American College, Madurai and I also declare that this work has not been submitted elsewhere for the award of any other degree.

Date- 2020

Madurai- 625002 (C.SABAREESH)

18pgz17

## CERTIFICATE

This is to certify that the dissertation work entitled "HOST PREFERENCE OF BLOOD FEEDING MOSQUITO IN RELATION TO AVAILABILITY OF HUMAN AND DOMESTIC ANIMAL IN URBAN, SEMI-URBAN AND RURAL AREA" has been carried out by C.SABAREESH (18PGZ**17**) as partial fulfilment for the Degree of Master of Science under my guidance during the year 2019-2020 in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002.


Dr. T. Joseph Thatheyus,
Head of the Department,
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DR.T. Fedric Rajkumar,
Assistant Professor,
PG & ResearchDepartment ofZoology,
The American College,
Madurai- 625002

## ACKNOWLEDGEMENTS

I thank Almighty God who gave me knowledge and strength for the successful completion of this project work.

I am thankful to My Parents for their support and encouragement during the course of my project.

I also like to thank Dr.M. Davamani Christopher, Pricipal, The American College, Madurai for me an opportunity to carryout this research project.

I convey my sincere thanks to Dr.A. Joseph Thatheyus, Professor and PG Head of the Zoology Department for his support throughout the research work.

I wish to express my deep sense of gratitude and ineptness to my guide Dr. Fedric Rajkumar, for his inspiring guidance, constructive criticisms, helpful suggestions and constant encouragement which had to the successful completion of this work.

My special thanks to Dr.R.Paramasivan , ICMR – Vector Control and Research Centre, Madurai, for whole heartedly aided in identification of the mosquitoes and let me use the research facility of VCRC laboratory.

I thank lab assistants for providing the needed infrastructure in the laboratory during my project work.

# STUDY ON AVIFAUNAL DIVERSITY IN SELLUR KANMAI ANDARULDASSPURAM, MADURAI

Dissertation submitted to The American College, Madurai in partial fulfillment for the award of the Degree of Master of Science in Zoology

S.DHANALAKSHMI

(18PGZ03)

SINCE 1881

POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY

THE AMERICAN COLLEGE

(Re-Accredited with `A´ Grade by NAAC)

MADURAI -625002

April 2020

DECLARATION

I hereby declare that this dissertation entitled ``Study on Avian Diversity in Sellur kanmai and Aruldasspuram, Madurai´´ has been originally carried out by me under the guidance of Mr.M.Rajesh and this work has not been submitted elsewhere for the award of any other degree.

Madurai (S.DHANALAKSHMI)

April 2020 (18PGZ03)

CERTIFICATE

This is to certify that this dissertation entitled ``Study on Avian Diversity in Sellur kanmai and Aruldasspuram, Madurai´´ submitted by S.Dhanalakshmi (18PGZ03) during the year 2019-2020 as a partial fulfillment for the degree of Master Of Science in Zoology is based on the results of the project carried out by her under my guidance and supervision in the Postgraduate & Research Department of Zoology, The American College, Madurai-625002.


**Dr. A. Joseph Thatheyus**

Head of the Department

Associated professor,

PG & Research Department of Zoology,

The American College,

Madurai- 625002.

**Mr. M. Rajesh**

(Guide and Supervisor)

Assistant professor,

PG & Research Department of Zoology,

The American College,

Madurai- 625002.


ACKNOWLEDGEMENTS

First and foremost I thank god Almighty for his showers of blessings bestowed on me throughout thesis study.

I thank **Dr. M. DavamaniChristober**, Principal & Secretary, The American College, Madurai for providing all the facilities needed for the completion of this work. I express my thanks to **Dr. A. Joseph Thatheyus**, Head PG & Research Department of Zoology, The American College, Madurai for his support.

I would like to thank my guide **Mr. M. Rajesh**, Assistant professor, PG & Research Department of Zoology, The American College, Madurai for his support, help and guidance.

I wish to express my profound gratitude to my beloved parents who have been constantly supporting and encouraging me always. I thank all my friends who directly and indirectly rendered help, support and encouragement throughout this project.

My special thanks to non teaching staffs, laboratory attended and juniors for their support to finish my work successfully.

# EPHEMEROPTERA, PLECOPTERA, AND TRICHOPTERA (EPT) COMPLEX AS INDICATOR FOR ECOLOGICAL QUALITY OF MANGALAMKOMBU STREAM (KODAIKANAL) WESTERN GHATS

Dissertation submitted to The American College in partial fulfilment of the

Degree of Master of Science in Zoology

**J. APURVA THANGAM**

**(ROLL No: 18PGZ02)**




**POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE**

**(Re-Accredited with 'A' Grade by NAAC)**

**MADURAI- 625002**

**MAY, 2020**

# DECLARATION

I do hereby declare that this research work entitled **"EPHEMEROPTERA, PLECOPTERA, AND TRICHOPTERA (EPT) COMPLEX AS INDICATOR FOR ECOLOGICAL QUALITY OF MANGALAMKOMBU STREAM (KODAIKANAL) WESTERN GHATS"** has been carried out by me under the guidance of **Dr.Sivaruban Thambiratnam**, at the Postgraduate and Research Department of Zoology, The American College, Madurai and I also declare that this work has not been submitted elsewhere for the award of any other degree.

May- 2020,

Madurai–625002**.** **(**J.APURVA THANGAM)

# CERTIFICATE

This is to certify that the dissertation work entitled **"EPHEMEROPTERE, PLECOPTERA, AND TRICHOPTERA (EPT) COMPLEX INDICATOR FOR ECOLOGICAL QUALITY OF MANGALAMKOMBU STREAM (KODAIKANAL) WESTERN GHATS" has** been carried out by **J. Apurva Thangam** (**18PGZ02**) as partial fulfilment for the Degree of Master of Science under my guidance during the year 2017- 2018 in the Postgraduate and Research Department of Zoology, The American college, Madurai-625002.

**Dr. A. Joseph Thatheyus,**
**Head of the Department,**
**PG and Research Department of zoology**
**The American College,**
**Madurai- 625002.**

**Dr. Sivaruban Thambiratnam**
**(Guide)**

## ACKNOWLEDGEMENTS

I am very much thankful to **my parents and family** for their support and encouragement during the course of my project work.

I convey my sincere and heartfelt thanks to **Dr.A.Joseph Thatheyus**, Head, PG Department of Zoology, for providing all necessary facilities which enabled us to complete project work.

This is a great pleasure to express my sincere gratitude and thanks to **Dr.Sivaruban Thambiratnam**, my guide for his ideas, effective support and continued encouragement which enabled for successful completion of this project.

Special thanks to our professors for their kindly help in completing this project.

I thank my uncle **T.R.Ravindran** for granting and helping me in my project work at his coffee estate.

I thank lab assistants for providing the needed infrastructure in the laboratory and rendering the help during the course of my project work.

I thank **P.Srinivasan, R.Isack, S.Susaritha** Research Scholars who have been encouraging me throughout the project and it is my responsible to thank **all my friends** for their help and making this project a successful one.

# SURVEILLANCE OF TICKS FROM ARULDHASPURAM AND VADAPAZHANJI AREAS IN MADURAI CITY, TAMIL NADU

A Dissertation submitted to The American College, Madurai in partial fulfillment of the requirements for the degree of **Master of Science in Zoology**


Submitted by

**S. KARTHIGA**

**(18PGZ09)**


SINCE 1881


**Postgraduate and Research Department of**

**Zoology The American College**

**Madurai – 625 002**


**April 2020**

Edit with WPS Office

## DECLARATION

I hereby declare that this dissertation work entitled**, "Surveillance of ticks from Aruldhaspuram and Vadapazhanji areas in Madurai city, Tamil Nadu"** has been carried out by me under the guidance of **Mr. K. J. Dhananjeyan,** Assistant Professor, PG & Research Department of Zoology and this has not submitted elsewhere for the award of any other degree.

Madurai – 02 (S. KARTHIGA)



Edit with WPS Office

## CERTIFICATE

This is to certify that this dissertation entitled, **"Surveillance of ticks from Aruldhaspuram and Vadapazhanji areas of Madurai city, Tamil Nadu"** has been carried out by **Karthiga. S (18PGZ09)** during the year 2019-2020 in the PG & Research Department of Zoology, The American College, Madurai.

**Dr. A. Joseph Thatheyus**
Head of the Department
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**Mr. K. J. Dhananjeyan**
Assistant Professor
PG & Research Department of
The American College
Madurai.



Edit with WPS Office

## ACKNOWLDGEMENT

Firstly, I would like to thank my parents for their blessings and support for me to finish this work.

I express my sincere thanks to **Dr. M. Davamani Christober**, Principal & Secretary, The American College, Madurai for providing the necessary laboratory facilities.

I express my sincere gratitude to **Dr. A. Joseph Thatheyus** Head of the Department for providing all necessary facilities which enabled me to complete the work.

I would like to express my sincere gratitude to **Dr. R. Paramasivan,** Scientist F & Officer-in- Charge, Vector Control Research Centre (Field Station), (ICMR), Madurai for allowing to use their laboratory facility and for his constant words of wisdom and encouragement.

I would like to extend my sincere thanks to **Mr. A. Veerapathiran,** Senior Technical Officer, Vector Control Research Centre (Field Station), (ICMR), Madurai for his great support in identifying the tick specimens.

I would like to express my personal indebtedness and gratefulness to my research guide, **Mr. K. J. Dhananjeyan**, The American College (Autonomous), Madurai, for is constant encouragement, free hand approach and valuable guidance throughout the work.

I thank my friends **Miss. S. Dhanalakshmi** and **Mr. N. Shak Abdulla** who had been encouraging me throughout the project work and it is my responsibility to thank my friends for their help and making this project a successful one.

S.KARTHIGA





Edit with WPS Office

Edit with WPS Office

# DIVERSITY, HABITATASSOCIATIONAND COMPARATIVE STUDY ON BUTTERFLIES IN DIFFERENT ZONES IN VALAYANKULAM VILLAGE, MADURAI DISTRICT, TAMIL NADU

**Dissertation submitted to The American College (Autonomous) affiliated to Madurai Kamaraj University in partial fulfillment for the award of the Degree of Master of Science in Zoology.**


## S.KETZIAL
**(Roll No. 18PGZ10)**






**POST GRADUATE & RESEARCH DEPARTMENT OF ZOOLOGY**
**THE AMERICAN COLLEGE**
Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA 3.46 on a 4 point scale
Madurai – 625002

June 2020

# DECLARATION

I hereby declare that this project titled **'DIVERSITY, HABITAT ASSOCIATION AND COMPARATIVE STUDY OF BUTTERFLIES IN DIFFERENT ZONES IN VALAYANKULAM VILLAGE, MADURAI DISTRICT'** has been originally done under the guidance of Mr. A. David Antony Raj, Assistant professor, Department of Zoology, The American College, Madurai in partial fulfillment for the degree of Master Of Science in Zoology and this work has not been submitted elsewhere for any other degree.

**STATION:** Madurai**PROJECT STUDENT**

**DATE:** 07.06.2020

S.KETZIAL (18PGZ10)

## CERTIFICATE

This is to certify that this project titled **"DIVERSITY, HABITAT ASSOCIATION AND COMPARATIVE STUDY ON BUTTERFLIES IN DIFFERENT ZONES IN VALAYANKULAM VILLAGA, MADURAI DISTRICT"** is certified and bonafide work of S.Ketzial in partial fulfillment for the degree of Master of Science in Zoology carried out by her under my guidance and supervision in the Department of Zoology, The American College, Madurai-2 in the academic year 2019-2020.

**HEAD OF THE DEPARTMENT**

**Dr. A. Joseph Thatheyus**
Associate Professor& Head
PG & Research Department of Zoology
The American College
Madurai

**PROJECT GUIDE**

A. David Antony Raj
Associate Professor
PG& Research Department of Zoology
The American College
Madurai

## ACKNOWLEDGEMENT

- I wholeheartedly thank Jesus Christ for his Grace bestowed upon me throughout this project.

- I extend my sincere gratitude to my principal Dr. M. Davamani Christopher, who gave me an opportunity to do this project.

- I am grateful to my institution The American College which gave me this project wherein I learnt so many things and my sincere thanks to the coordinators of this project
.
- I am also thankful to my Head of the Department Dr. A. Joseph Thatheyus, for the support given.

- I am highly obliged to my project guide, Mr. A. David Antony Raj, professor of Department of Zoology, for his guidance in completing this project.

- My sincere thanks to my dad, Mr. K. Selvan and my brother Mr. S. David Steve Selvan, for helping me in transport and strong support during the 10 months of this project.

- I am so grateful to my mom Mrs. S. Selvi and my sister Ms. S. JemmimaRajam, who helped me in prayer and during the awareness programs.

- I am highly obliged to Mrs. Ganeshwari, Ms. Meenakshi, who helped me in this project in correcting my identification of butterflies.

- I would also like to thank my community people who cooperated well during the awareness program.

**Biochemical changes in the fish Catla catla after exposure of Mercury**

**A DISSERTATION TO THE AMERICAN COLLEGE (AUTONOMOUS) AFFILIATED TO MADURAI KAMARAJ UNIVERSITY IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF THE DEGREE OF**

**Master of Science in Zoology**

**By**

**K.LAKSHMANAN, Roll. No. 18PGZ23**

**POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re accredited (2nd cycle) by NAAC with Grade 'A' CGPA – 3.46 on a 4 –point scale)**

**MADURAI**

**SEPTEMBER 2020**



**CERTIFICATE**

**This is to be certify that the dissertation entitled, "Biochemical changes in the fish Catla catla after chronic exposure of Mercury" submitted by Mr. K.LAKSHMANAN, (Roll. No. 18PGZ23) is a record of bonofide research work carried out by him under my guidance and supervision during the period 2019-2020 for the partial fulfillment of the Degree of Master of Science in Zoology at The American College (Autonomous), Madurai. I further certify that this dissertation or of it has not been submitted elsewhere for any other degree or diploma or certificate course.**

**DR. J. JOSEPH THATHEYUS,**
**Associate Professor and Head,**
**Research Department of Zoology,**
**Zoology, The American College (Autonomous),**
**(Autonomous), Madurai - 625 002.**

**Dr. P.DAILIAH ROOPHA,**
**Assistant Professor, PG &**
**PG & Research Department of**
**The American College**
**Madurai - 625 002.**

**PLACE: Madurai** **DATE:**



**DECLARATION**

**I hereby declare that the dissertation entitled "Biochemical changes in the fish Catla catla after**

**chronic exposure of Mercury" has been originally carried out by myself, under the guidance of**

**Dr. P. Dailiah Roopha, M.Sc., M.Phil., Ph.D., Assistant Professor in Post Graduate and**

**Research Department of Zoology, The American College (Autonomous), Madurai in partial**

**fulfillment for the degree of Master of Science in Zoology during the Academic year 2019-2020**

**and this work has not been submitted elsewhere for the award of any other degree or diploma or**

**certificate course.**

**PLACE: Madurai**
**(K.LAKSHMANAN)**

**DATE:**



**ACKNOWLEDGEMENT**

**My grateful thanks are due to Dr. M. Davamani Christober., Principal and Secretary, The American College (Autonomous), Madurai, for giving me an opportunity, to complete my M.Sc., degree course in this college.**

**I am also grateful to Dr. J. Joseph Thatheyus, Head, Post Graduate and Research Department of Zoology, The American College (Autonomous), for his support.**

**With deep sense of respect, I would like to express my thanks to Dr. E. Joy Sharmila, Head, Under Graduate Department of Zoology, The American College (Autonomous), for her encouragement.**

**I would like to take opportunity to express my humble gratitude to Dr. P. Dailiah Roopha, M.Sc., M.Phil., Ph.D., Assistant Professor, Post Graduate and Research Department of Zoology, The American College (Autonomous), for her**

**constant guidance and willingness to share her vast knowledge made me understand this project and its manifestations in great depths and helped us to complete the assigned tasks.**

**I am obliged to all staff members of Post Graduate and Research Department of Zoology, The American College (Autonomous), for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my assignment.**

**I also express my thanks to my Family Members love and care.**

**I wish to express my hearty thanks to my classmates, for their advice due to which I was able to complete the course successfully and present the dissertation work with confidence.**

**(K.LAKSHMANAN)**

# STUDIES ON THE DIVERSITY OF BUTTERFLIES AND DBIRDS AT SACRED HEART COLLEGE CAMPUS IN KODAIKANAL

A Dissertation submitted to The American College in Partial fulfillment of the requirements for the degree of **Master of Science in Zoology**


Submitted by

**J.MALAVIKA**

**(18PGZ25)**






**Postgraduate &Research Department of Zoology**

**The American College**

**Madurai – 625 002**


**April 2020**

## DECLARATION

I hereby declare that this dissertation work entitled**, "Studies on Diversity of Butterflies and Birds at Sacred Heart College Campus in Kodaikanal ",** has been carried out by me under the guidance of **Dr. A. Joseph Thatheyus,** Head of the Department, PG& Research and Department of Zoology and this has not submitted elsewhere for the award of any other degree.

Madurai – 02

(MALAVIKA)
18PGZ25

## CERTIFICATE

This is to certify that this dissertation entitled**, "Studies on Diversity of Butterflies and Birds at Sacred Heart College Campus in Kodaikanal "** has been submitted by **MALAVIKA J (18PGZ25)** during the year 2019-2020 in the PG and Research Department of Zoology, **The American College, Madurai.**

**Dr. A. Joseph Thatheyus** **Dr. A.Joseph Thatheyus**

HeadGuide

PG& Research Department of Zoology PG& Research Department of Zoology

The American College The American College

Madurai Madurai

## ACKNOWLDGEMENT

Firstly, I would like to thank **my parents** for their blessings and support for me to finish this work.

I would like to express my personal indebtedness and gratefulness to my research guide, **Dr. A. Joseph Thatheyus**, Head, PG& Research Department of Zoology, The American College (Autonomous), Madurai, for is constant encouragement, free hand approach and valuable guidance throughout the work.

I express my sincere thanks to **Dr. M. Davamani Christober**, Principal, The American College, and Madurai for providing the necessary laboratory facilities.

**J.MALAVIKA**

# PREVALENCE OF LYMPHATIC FILARIASIS IN WEST MADURAI

## AN EPIDIMIOLOGICAL STUDY

Dissertation submitted to The American College, Madurai in partial fulfillment for the award of the Degree of Master of Science Zoology

P.MANIKANDAN

(18PGZ12)

SINCE 1881

POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY

THE AMERICAN COLLEGE

(Re-Accredited with ` A 'Grade by NAAC)

MADURAI -625002

April 2020

# DECLARATION

I hereby declare that this dissertation entitled ``Prevalence of lymphatic filariasis in west Madurai: an epidemiological study" has been carried out by me under the guidance of Dr. T. FREDRICK RAJKUMAR and this work has not been submitted elsewhere for the award of any other degree.

Madurai (P.MANIKANDAN)

April 2020

# CERTIFICATE

This is to certify that this dissertation entitled ``PREVALENCE OF LYMPHATIC FILARIASIS IN WEST MADURAI: AN EPIDIMIOLOGICAL STUDY" submitted by P.MANIKANDAN (18PGZ12) as a partial fulfillment for the degree of Master Of Science in Zoology is based on the results of the project carried out by him under my guidance and supervision in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002.


**Dr. A. Joseph Thatheyus**

Head of the Department

Associated professor,

PG & Research Department of Zoology,

The American College,

Madurai-625002.

**Dr. T. FREDRICK RAJKUMAR**

(Guide and Supervisor)

Assistant professor,

PG & Research Department of Zoology,

The American College,

Madurai-625002.

# Acknowledgments

First and foremost I thank god Almighty for his showers of blessings bestowed on me throughout thesis study.

I thank **Dr. M. Davamani Christober**, Principal & Secretary, The American College, Madurai for providing all the facilities needed for the completion of this work. I express my thanks to **Dr. A. Joseph Thatheyus**, Head PG & Research Department of Zoology, The American College, Madurai for his support.

I would like to thank my guide **Dr. T. FREDRICK RAJKUMAR**, Assistant professor, PG & Research Department of Zoology, The American College, Madurai for his support, help and guidance.

I wish to express my profound gratitude to my beloved parents who have been constantly supporting and encouraging me always.

My special thanks to My friends and juniors for their support to finish my work successfully.

# STUDY OF ALPHA AND BETA HAEMOLYTIC BACTERIA USING BACTERIAL STRAINS CAUSING

# URINARY TRACT INFECTION

Dissertation submitted to The American College, Madurai in partial fulfillment for award of the Degree of Master of Science Zoology

R.PAVITHRA

(18PGZ14)

SINCE 1881

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THE AMERICAN COLLEGE

(Re-Accredited with ` A ‘Grade by NAAC)

MADURAI -625002

April 2020

***

## DECLARATION

I here declare that is dissertation entitled "**Study of Alpha and Beta and haemolytic bacteria using bacterial strains causing urinary tract infection,-The American College-Madurai"** has been carried out by **Dr. P. Velladurai,** Assistant Professor, P.G Department of Zoologymeunder the guidance of and this work has not been submitted elsewhere for the award of any other degree.

Madurai — R. Pavithra

April 2020 — 18PGZ14

## CERTIFICATE

This is to certify that this dissertation entitled "**Study of Alpha and Beta Haemolytic Bacteria Using Bacterial Strains Causing Urinary Tract Infection, The American College Madurai"**submitted by **R.Pavithra(18PGZ14)** as a partial fulfillment for the degree of master science in Zoology is based on the results of the project carried out by her under my guidance and supervision in the postgraduate and Research Department of Zoology-The American College, Madurai-625002.

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Head of the Department
Associated Professor
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Assistant Professor

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"

**ACKNOWLEDGEMENTS**

First and fore most I thank god Almighty for his of blessing bestowed on me throughout thesis study.

I thank **Dr. M.DavamaniChristober,** Principal and Secretary, The American College Madurai, for providing all the facilities needed for the completion of this work. II express my thank to**Dr.A.Joseph Thatheyus,** Head of PG & Research Department of Zoology, The American College Madurai, for this support.

I would like to thank my guide**Dr.P.Velladurai,** Assistant professor, PG& Research Department of Zoology, The American College Madurai, for his support, help and guidance.

I wish to express my profound gratitude to my beloved parents who have been constantly supporting and encouraging me always.

My special thanks to my brother Ganapathi .S and my friends and juniors for their support to finish my work successfully.

# Protective role of *Spirulina fusiformis* against a toxicity effect of mercury on *Tilapia* (*Oreochromis niloticus) fish*

A DISSERTATION TO THE AMERICAN COLLEGE (AUTONOMOUS)
AFFILIATED TO MADURAI KAMARAJ UNIVERSITY
IN PARTIAL FULFILLMENT OF REQUIREMENTS
FOR THE AWARD OF THE DEGREE OF

*Master of Science in Zoology*

By

**S.GOWSALYA DEVI,**
**Roll. No. 18PGZ04**

SINCE 1881

**POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE (AUTONOMOUS)**

**(Re accredited (2nd cycle) by NAAC with Grade 'A' CGPA – 3.46 on a 4 –point scale)**

**MADURAI**

**SEPTEMBER 2020**

# CERTIFICATE

This is to be certify that the dissertation entitled, **"Protective role of *Spirulina fusiformis* against a toxicity effect of mercury on *Tilapia* (*Oreochromis niloticus*) fish"** submitted by Mr. S.GOWSALYA DEVI, (Roll. No. 18PGZ04) is a record of bonofide research work carried out by her under my guidance and supervision during the period 2019-2020 for the partial fulfillment of the Degree of Master of Science in Zoology at The American College (Autonomous), Madurai. I further certify that this dissertation or of it has not been submitted elsewhere for any other degree or diploma or certificate course.

**DR. J. JOSEPH THATHEYUS,**
Associate Professor and Head,
PG & Research Department of Zoology,
The American College (Autonomous),
Madurai - 625 002.

**Dr. P.DAILIAH ROOPHA,**
Assistant Professor,
PG & Research Department of Zoology,
The American College (Autonomous),
Madurai - 625 002.

PLACE: Madurai
DATE:

# DECLARATION

I hereby declare that the dissertation entitled **"Protective role of *Spirulina fusiformis* against a toxicity effect of mercury on *Tilapia* (*Oreochromis niloticus*) *fish"*** has been originally carried out by myself, under the guidance of **Dr. P. Dailiah Roopha, M.Sc., M.Phil., Ph.D.,** Assistant Professor in Post Graduate and Research Department of Zoology, The American College (Autonomous), Madurai in partial fulfillment for the degree of Master of Science in Zoology during the Academic year 2019-2020 and this work has not been submitted elsewhere for the award of any other degree or diploma or certificate course.

PLACE: Madurai (**S.GOWSALYA DEVI**)

DATE:

# ACKNOWLEDGEMENT

I thank to **God Almighty**, for giving the wisdom, strength, support and knowledge in exploring things; for the guidance is helping surpass all the trials that the researchers encountered and for giving determination to pursue their studies and to make this study possible.

My grateful thanks are due to **Dr. M. Davamani Christober.,** Principal and Secretary, The American College (Autonomous), Madurai, for giving me an opportunity, to complete my M.Sc., degree course in this college.

I am also grateful to **Dr. J. Joseph Thatheyus,** Head, Post Graduate and Research Department of Zoology, The American College (Autonomous), for his support.

With deep sense of respect, I would like to express my thanks to **Dr. E. Joy Sharmila,** Head, Under Graduate Department of Zoology, The American College (Autonomous), for her encouragement.

I would like to take opportunity to express my humble gratitude to **Dr. P. Dailiah Roopha, M.Sc., M.Phil., Ph.D.,** Assistant Professor, Post Graduate and Research Department of Zoology, The American College (Autonomous), for her constant guidance and willingness to share her vast knowledge made me understand this project and its manifestations in great depths and helped us to complete the assigned tasks.

I am obliged to **all staff members** of Post Graduate and Research Department of Zoology, The American College (Autonomous), for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my assignment.

I also express my thanks to my **Family Members**, for their prayers, love and care.

I wish to express my hearty thanks to my classmates, for their advice due to which I was able to complete the course successfully and present the dissertation work with confidence.

(S.GOWSALYA DEVI)

# STUDIES ON THE INFLUENCE OF ARTIFICIAL FISH FEEDS ON THE GROWTH OF THE FINGERLINGS OF THE SPOTTED TILAPIA, *PELMATOLAPIA MARIAE*

A Dissertation submitted to The American College in Partial fulfillment of the requirements for the degree of **Master of Science in Zoology**


Submitted by

**N. SHAK ABDULLA**

**(18PGZ26)**






**Postgraduate & Research Department of Zoology**

**The American College**

**Madurai – 625 002**


**April 2020**

## DECLARATION

I hereby declare that this dissertation work entitled**, "Studies on the influence of artificial feeds on the growth of the fingerlings of the Spotted Tilapia, *Pelmatolapia mariae*",** has been carried out by me under the guidance of **Dr. A. Joseph Thatheyus,** Head, PG & Research and Department of Zoology and this has not submitted elsewhere for the award of any other degree.

Madurai – 02 (SHAK ABDULLA)

## CERTIFICATE

This is to certify that this dissertation entitled**, Studies on the influence of artificial feeds on the growth of the fingerlings of the Spotted Tilapia, *Pelmatolapia mariae,*** has been submitted by **Shak Abdulla.N (18PGZ26)** during the year 2019-2020 in the PG & Research Department of Zoology, **The American College, Madurai.**

**Dr. A. Joseph Thatheyus**

Head

PG & Research Department of Zoology

The American College

Madurai

**Dr. A.Joseph Thatheyus**

Guide

PG & Research Department of Zoology

The American College

Madurai

## ACKNOWLDGEMENT

Firstly, I would like to thank **my parents** for their blessings and support for me to finish this work.

I would like to express my personal indebtedness and gratefulness to my research guide, **Dr. A. Joseph Thatheyus**, Head, PG & Research Department of Zoology, The American College (Autonomous), Madurai, for is constant encouragement, free hand approach and valuable guidance throughout the work.

I thank **D. Vigneshkumar, K. Lakshmanan, S. Karthiga, and J. Apurva Thangam** who had been encouraging me throughout the project and it is my responsibility to thank **all my friends** for their help and making this project a successful one.

I express my sincere thanks to **Dr. M. DavamaniChristober**, Principal, The American College, Madurai for providing the necessary laboratory facilities.

**N. SHAK ABDULLA**

# DIVERSITY AND DISTRIBUTION OF EPHEMEROPTERA, PLECOPTERA AND TRICOPTERA (EPT) IN STREAMS OF AYYANAAR FALLS, SOUTHERN EASTERN GHATS

Dissertation submitted to The American College (Autonomous), Madurai, Affiliated to Madurai Kamaraj University in partial fulfilment of the Degree of Master of Science in Zoology


Submitted by

**T. KIRUTHIKA**

**(18PGZ11)**

Under the guidance of

**Dr. SIVARUBAN THAMBIRATNAM, M.Sc., M.Phil., Ph.D.**






**Post Graduate and Research Department of Zoology**

**The American College (Autonomous)**

**(Re-Accredited with 'A' Grade by NAAC)**

**Madurai- 625002**


**April 2020**

## DECLARATION

I do hereby declare that this research work entitled “DIVERSITY AND DISTRIBUTION OF EPHEMEROPTERA, PLECOPTERA AND TRICOPTERA IN STREAMS OF AYYANAAR FALLS, SOUTHERN EASTERN GHATS” has been carried out by me and under the guidance of Dr. Sivaruban Thambiratnam, at the Postgraduate and Research Department of Zoology, The American College, Madurai and I also declare that this work has not been submitted elsewhere for the award of any other degree.

Date- 2020

Madurai- 625002 (T. KIRUTHIKA)

# CERTIFICATE

This is to certify that the dissertation work entitled “DIVERSITY AND DISTRIBUTION OF EPHEMEROPTERA, PLECOPTERA AND TRICOPTERA(EPT) IN STREAMS OF AYYANAAR FALLS, SOUTHERN EASTERN GHATS” has been carried out by T.KIRUTHIKA (18PGZ11) as partial fulfilment for the Degree of Master of Science under my guidance during the year 2019-2020 in the Postgraduate and Research Department of Zoology, The American College, Madurai-625002.


Dr. T. Joseph Thatheyus,
Head of the Department,
PG & Research Department of Zoology,
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Dr. Sivaruban Thambiratnam,
Assistant Professor,
PG & ResearchDepartment ofZoology,
The American College,
Madurai- 625002

## ACKNOWLEDGEMENTS

I thank Almighty God who gave me knowledge and strength for the successful completion of this project work.

I am thankful to My Parents for their support and encouragement during the course of my project.

I also like to thank Dr.M. Davamani Christopher, Principal, The American College, Madurai for me an opportunity to carry out this research project.

I convey my sincere thanks to Dr .A. Joseph Thatheyus, Professor and PG Head of the Zoology Department for his support throughout the research work.

I wish to express my deep sense of gratitude to my guide Dr. Sivaruban Thambiratnam, for his inspiring guidance, constructive criticisms, helpful suggestions and constant encouragement which had to the successful completion of this work.

I thank lab assistants for providing the needed infrastructure in the laboratory during my project work.

**ISOLATION AND CHARACTERIZATION OF ENDOPHYTIC MICROORGANISM FROM *Halymenia venusta* (RED ALGAE) AND *Spatoglossum marginatum* (BROWN ALGAE)**

A dissertation submitted to The American college (Autonomous) in the partial fulfilment of the degree of **Master of science in Zoology**

Submitted by

**D.VIKNESHKUMAR**

**(18PGZ21)**



**POSTGRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY**

**THE AMERICAN COLLEGE**

**MADURAI - 625002**

**APRIL 2020**

*DEDICATED*

*TO*

*My Parents*

*My Sister & Brother*

*My Friends*



**DECLARATION**

I hereby declare that the project entitled "**Isolation and Characterization of Endophytic Microorganism from *Halymenia venusta* (Red algae) and *Spatoglossum marginatam* (Brown algae)"** has been originally carried out by me under the supervision of **Mrs. J. Stella Mary, M.Sc., M.Phil., (Ph.D)** Assistant Professor, Post Graduate & Research Department of Zoology and I assure that this work has not been submitted elsewhere for the award of any other degree.

Date: (D. VIKNESHKUMAR)

Place:

**CERTIFICATE**

This is to certify that this project thesis entitled "**Isolation and Characterization of Endophytic Microorganism from *Halymenia venusta* (Red algae) and *Spatoglossum marginatam* (Brown algae)"** is a bonafide work done by **VIKNESHKUMAR.D (18PGZ21)** during the year 2019-2020 submitted in partial fulfilment for the Degree of Master of Science in Zoology is based on the results of the experiments carried out in the Post Graduate Department of Zoology, The American College, Madurai. This dissertation has not been submitted elsewhere for any other degree.

**Dr. A. Joseph Thatheyus** **Mrs. J.Stella Mary**

Head of the Department

PG & Research Department of Zoology

The American College,

Madurai-625 002.

Research Guide,

PG & Research Department of Zoology

The American College,

Madurai-625 002.



**ACKNOWLEGEMENTS**

I acknowledgement that it is by the Grace of God and his presence, I was able to complete this work.

I own thanks to **Dr. A. Joseph Thatheyus, M.Sc., M.Phil. Ph.D,** Head, PG and Research Department of Zoology, The American College, Madurai.

I express me deep sense of gratefulness to my guide **Mrs.J.Stella Mary, M.Sc., M.Phil., (Ph.D)** Assistant Professor, PG Department of Zoology for her invaluable guidance, encouragement and suggestion throughout the completion of this work.

I sincerely thank all faculties, Department of Zoology for their suggestion and encouragement during the project

My special thanks **my parents Mr. B. Dharmaraj , Mrs . D .Rathiga** for their care and support on the my project work.

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D. Vikneshkumar