

# LIE ALGEBRAS

Project work submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirements for the award of the degree

of

**MASTER SCIENCE IN MATHEMATICS**

By

**ANJANA RAVEENDRAN**

REG. NO. 200011014839



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University)

2020-2022

**MAR THOMA COLLEGE FOR WOMEN PERUMBAYOOR**  
(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

This is to certify that the project entitle "LIE ALGEBRAS" is the bonafide record of the work done by **MISS. ANJANA RAVEENDRAN** (Reg. NO. 200011014839) in partial fulfillment of the requirement of the award of M.Sc MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022

Viva Voce Examination held on 26/09/2022.....

Project Guide

Head of the Department

Department of Mathematics  
Mar Thoma College for Women  
Perumbayoor - 683 542

External Examiner

# **A study on semigroups**

Project report submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfilment of the requirements for the award of the degree of  
**MASTER OF SCIENCE IN MATHEMATICS**

SUBMITTED BY

ANJANA VISWAMBHARAN

REG NO. 200011014840



Department of Mathematics

**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

**(Affiliated to Mahatma Gandhi University)**

**2020-2022**

MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR  
(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

This is to certify that the project entitled "A study on Semigroups" is the bonafied record of original research work done by Ms. ANJANA VISWAMBHARAN (REG NO; 200011014840) in partial fulfilment of the requirement for the award of MSc MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022.

Viva Voice Examination held on 26/09/2022

Project Guide

Head of the Department

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 686 542

External Examiner

# MATHEMATICAL MODELLING

*Project work submitted to*

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

*In partial fulfillment of the requirements for the award of the degree*

*Of*

**MASTER DEGREE IN MATHEMATICS**

*By*

**ASHA SHAJI**

**Reg. No: 200011014841**



**DEPARTMENT OF MATHEMATICS**  
**MAR THOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**

*(Affiliated to Mahatma Gandhi University)*

**2020-2022**

MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



CERTIFICATE

This is to certify that the project entitled "MATHEMATICAL MODELLING" is a bonafide record of the work done by Miss. ASHA SHAJI (Reg. no:200011014841), in partial fulfillment of the requirement for the award of M.Sc. MATHEMATICS Degree from Mahatma Gandhi University during the academic session 2020 - 2022.

Viva Voce Examination held on ... 28/09/2022 .....

*Ashnaiz*  
Project Guide

*Shalika*  
Head of the Department

*Ashnaiz*  
*Shalika*  
External Examiner

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor, Kerala

**CPM AND PERT PROJECT MANAGEMENT  
TECHNIQUES**

**Project Work Submitted to**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the Requirements for the award of the degree of

**MASTER OF SCIENCE IN MATHEMATICS**

**By**

**ASNA K A**

**REG. NO. 200011014842**



**DEPARTMENT OF MATHEMATICS**

**MARTHOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

**(Affiliated to Mahatma Gandhi University)**

**(2020-2022)**

# MARTHOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



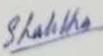
## CERTIFICATE

This is to certify that the project entitled " CPM AND PERT PROJECT MANAGEMENT TECHNIQUES" is a bonafide record of the work done by Miss ASNA K A, (REG. NO. 200011014842) in partial fulfillment of the requirement for the award of M.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022.

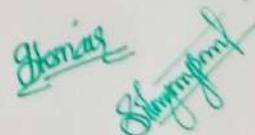
Viva Voce Examination Held On...26/09/2022.....

Project Guide

  
EMILDA SEBASTIAN

  
Head of the Department

SHALITHA JACOB

  
External

Department of Mathematics  
Marthoma College for Women  
Perumbavoor - 683 542

**A STUDY ON TRI TOPOLOGICAL SPACES**

**Project Work Submitted to**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the Requirements for the award of the degree of

**MASTER OF SCIENCE IN MATHEMATICS**

**By**

**JEBNA K JALEEL**

**REG. NO. 200011014844**



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN**

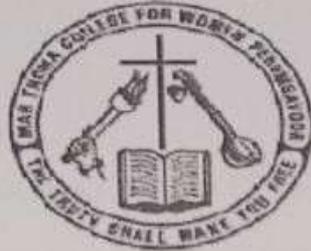
**PERUMBAVOOR**

**(Affiliated to Mahatma Gandhi University)**

**(2020-2022)**

MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



CERTIFICATE

This is to certify that the project entitled "A STUDY ON TRI TOPOLOGICAL SPACES", is a bonafide record of the work done by Mrs. JEBNA K JALEEL, (REG. NO. 200011014844) in partial fulfillment of the requirement for the award of M.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022.

Viva Voce Examination Held On.....

Project Guide

KEERTHY KISHORE A

Head of the Department

Dr. Shalitha Jacob

External

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 544

# **DECISION THEORY**

Project work submitted to  
**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

*In partial fulfillment of the requirements for the  
award of the degree*

*Of*

**MASTERS DEGREE IN MATHEMATICS**

**BY**

**NASREEN K B**

Reg No: 200011014845



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**(Affiliated to Mahathma Gandhi University)**

**2020-2022**

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

(Affiliated to Mahathma Gandhi University)



CERTIFICATE

This is to certify that the project entitle "DECISION THEORY" is the bonafide record of the work submitted by Miss. NASREEN K.B(Reg. No.200011014845) in partial fulfillment of the requirement for the award of M.Sc MATHEMATICS degree from Mahathma Gandhi University KOTTAYAM during the academic session 2020-2022.

Viva voce examination held on..26/09/2022

*Shinyamol*  
Project guide

*Shalika*  
Head of the Department

*Shanais*  
*Shinyamol*  
External examiner

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683568

**SPECTRAL GRAPH THEORY**

Project work Submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

*In partial fulfilment of the requirement for the award of the degree*

*of*

**MASTER OF SCIENCE IN MATHEMATICS**

**By**

**NAYANA ASOKAN**

**REG. NO. 200011014846**



DEPARTMENT OF MATHEMATICS  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

*(Affiliated to Mahatma Gandhi University)*

2020-2022

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

*(Affiliated to Mahatma Gandhi University, Kottayam)*



**CERTIFICATE**

This is to certify that the project entitled "SPECTRAL GRAPH THEORY" is the bonafide record of the work done by Miss. Nayana Asokan(Reg. No. 200011014846) in partial fulfillment of the requirement for the award of M.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022.

Viva Voce Examination held on 26/09/2022 .....

Project Guide

Head of the Department

External Examiner

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 642

**HYPERGRAPH**

Project work submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirements for the award of the degree of

**MASTER OF SCIENCE IN MATHEMATICS**

**SUBMITTED BY**

**PRAVEENA P S**

**REG NO.200011014847**



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University)

2020-2022

MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR  
(Affiliated to Mahatma Gandhi University)



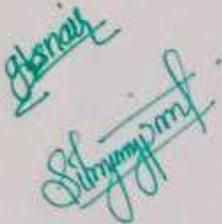
CERTIFICATE

This is to certify that this project entitled "HYPERGRAPH" is the bonafide record of the work done by Ms. Praveena PS (Reg No: 200011014847) in partial fulfillment of the requirement for the award of M.sc MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022

Viva Voce Examination held on 26/09/2022 .....

  
Project Guide  
Dr. Gigi George

  
Head of the Department  
Dr. Shalitha Jacob

  
External Examiner

# **GRACEFUL GRAPHS**

Project work submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirements for the award of the degree

of

**MASTER OF SCIENCE IN MATHEMATICS**

By

**RAMSEENA P A**

**REG. NO.200011014848**



**DEPARTMENT OF MATHEMATICS**  
**MAR THOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University)

2020-2022

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



## CERTIFICATE

This is to certify that the project entitle “**GRACEFUL GRAPHS**” is the bonafide record of the work done by Miss. RAMSEENA P A (Reg.No. 200011014848) in partial fulfillment of the requirement for the award of M.Sc MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022.

Viva voce Examination held on 26/09/2022.....

*Anu*

Project Guide

*Shalika*

Head of the Department

Department of Mathematics  
Thoma College for Women  
Perumbavoor - 683 542

*Shenais*

*Shyamal*

External Examiner

# COVERING SPACES

*Project submitted to*

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

*In partial fulfilment of the requirements for the award of the  
Degree of*

**MASTER OF SCIENCE IN MATHEMATICS**

*by*

**SHILPA SHAJI**

**REG.NO:200011014849**



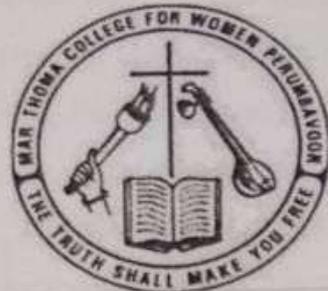
DEPARTMENT OF MATHEMATICS  
**MARTHOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**

*(Affiliated to Mahatma Gandhi University)*

**2020-2022**

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



## CERTIFICATE

This is to certify that the project entitled "COVERINGSPACES", submitted by Mrs. Shilpa Shaji in partial fulfilment of the requirements for the award of M.Sc. Degree in Mathematics during the year 2020-2022.

Shilpa Shaji

Viva Voce Examination held on...26/09/2022

*Shilpa Shaji*  
*Shilpa Shaji*

Project Guide

Gopikrishna S Nair

Head of the Department.

Dr. Shalitha Jacob

External Examiner

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 542

# TRIBONACCI CONVOLUTION TRIANGLE

*Project work submitted to*

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

*In partial fulfillment of the requirements for the award of the degree*

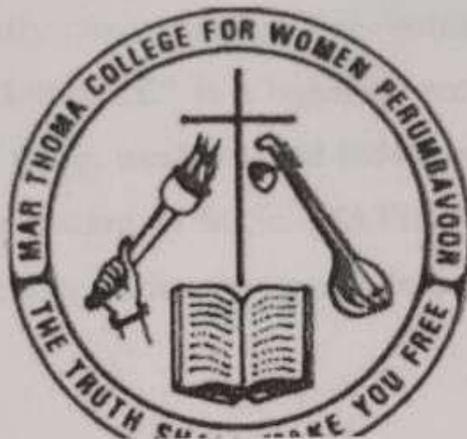
*Of*

**MASTER DEGREE IN MATHEMATICS**

*By*

**SOYA JOY**

**Reg. No: 200011014850**



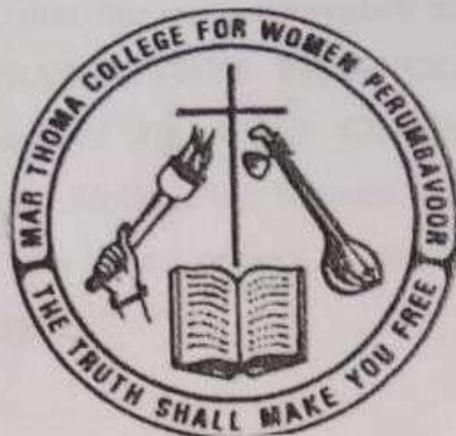
**DEPARTMENT OF MATHEMATICS  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

*(Affiliated to Mahatma Gandhi University)*

**2020-2022**

**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**

*(Affiliated to Mahatma Gandhi University)*



**CERTIFICATE**

This is to certify that the project entitled "TRIBONACCI CONVOLUTION TRIANGLE" is a bonafide record of the work done by Miss. SOYA JOY (Reg. no:200011014850), in partial fulfillment of the requirement for the award of M.Sc. MATHEMATICS Degree from Mahatma Gandhi University during the academic session 2020 - 2022.

Viva Voce Examination held on ...26/09/2022.....

*[Handwritten signature]*

**Project Guide**

*[Handwritten signature]*

**Head of the Department**  
Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 549

*[Handwritten signature]*

**External Examiner**

**CENTRALITY MEASURE**

Project work submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

*In partial fulfillment of the requirements for the award of the degree of*

**MASTER OF SCIENCE IN MATHEMATICS**

By

**SREELAKSHMI T R**

**REG. NO. 200011014851**



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

*(Affiliated to Mahatma Gandhi University)*

2020-2022

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



CERTIFICATE

This is to certify that the project entitle " CENTRALITY MEASURE "is the bonafide record of the work done by Miss. SREELAKSHMI T R (Reg.No.200011014851) in partial fulfillment of the requirement for the award of M.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022.

Viva Voce Examination held on ... 26/09/2022 .....

*Aru*  
Project guide

*Shalika*  
Head of the Department

*Shanaya*  
*Shrimypral*  
External Examiner

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 687 542

**MYSTERY OF FRACTALS**

**Project Work Submitted to**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the Requirements for the award of the degree of

**MASTER OF SCIENCE IN MATHEMATICS**

**By**

**SUSAN VARGHESE**

**REG. NO. 200011014852**



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

**(Affiliated to Mahatma Gandhi University)**

**(2020-2022)**

MARTHOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



CERTIFICATE

This is to certify that the project entitled "MYSTERY OF FRACTALS", is a bonafide record of the work done by Miss SUSAN VARGHESE (REG. NO. 200011014852) in partial fulfillment of the requirement for the award of M.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2020-2022.

Viva Voce Examination Held On... 26/09/2022.....

Project Guide

SILVEY PAUL

Head of the Department

Dr. SHALITHA JACOB

External

Department of Mathematics  
Marthoma College for Women  
Perumbavoor - 683 542

**A STUDY ON THE INFLUENCE OF COVID 19 ON ONLINE CONSUMER  
PURCHASING BEHAVIOUR AND BUSINESS OPERATION**

A dissertation submitted to

**MAHATMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**BASI LA P S(190021075616)**

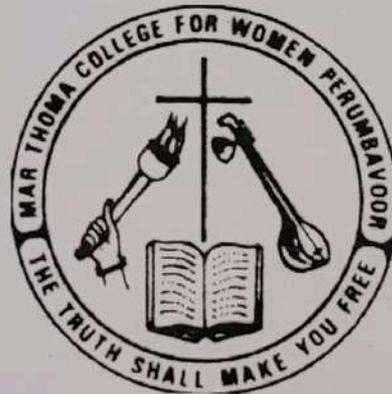
**MEENAKSHI O S(190021075617)**

**NAVYA JOSE(190021075618)**

**NIVYA JOSE(190021075620)**

Under the guidance of

Miss.TJ VISHNUPRIYA

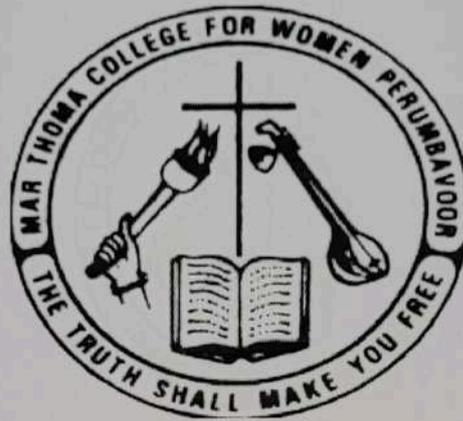


**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019-2022**

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



CERTIFICATE

This is to certify that the project entitled “**A STUDY ON THE INFLUENCE OF COVID19 ON ONLINE CONSUMER PURCHASING BEHAVIOUR AND BUSINESS OPERATIONS**” is a record of research work jointly done by Kumari.**BASILA P S**, Kumari.**MEENAKSHIO S**, Kumari.**NAVYA JOSE**, Kumari.**NIVYA JOSE** in partial fulfillment of the requirement of the **DEGREE OF BACHELOR OF COMMERCE** under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for award in other similar title of recognition.

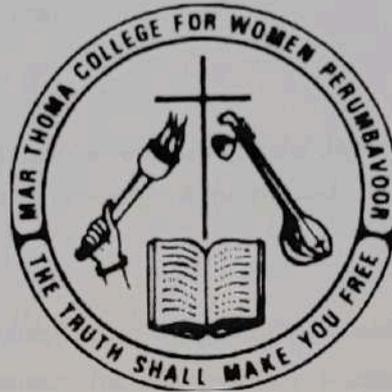
*Vally*  
T. J. Vishnupriya  
Internal project guide

*Samitha*  
External examiner

Date: 16/05/23

*Samitha*  
Head of the Department

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

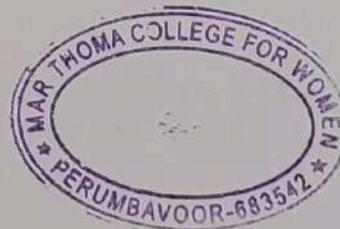


PRINCIPAL'S CERTIFICATE

This is to certify that the project entitled "A STUDY ON THE INFLUENCE OF COVID 19 ON ONLINE CONSUMER PURCHASING BEHAVIOUR AND BUSINESS OPERATION" has been completed by Kumari.BASILA P S (190021075616), Kumari. MEENAKSHI O S(190021075617), Kumari. NAVYA JOSE (190021075618),Kumari.NIVYA JOSE (190021075620) under the guidance of Miss.T J VISHNUPRIYA.

Dr. SUJO MARY VARGHESE

PRINCIPAL- IN - CHARGE



DR. SUJO MARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

[Type text]

**A STUDY ON AWARENESS AND ATTITUDE OF WORKING WOMEN TOWARDS  
STOCK MARKET**

A dissertation submitted to

**MAHATHMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**ASWATHY P.R (190021075600)**

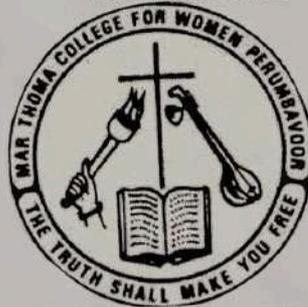
**ASWATHY RAJEEVAN (190021075601)**

**AYSHA BEEVI C.H (190021075602)**

**FARHANA MUHAMMED (190021075603)**

Under the guidance of

Mrs. Anandhi R



**DEPARTMENT OF COMMERCE**

**MARTHOMA COLLEGE FOR WOMEN, PERUMBAAVOOR**

**2019-2022**

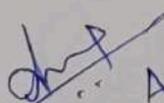
[Type text]

DEPARTMENT OF COMMERCE  
MARTHOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

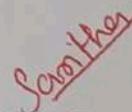


CERTIFICATE

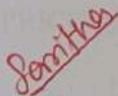
This is to certify that the project entitled “A STUDY ON AWARENESS AND ATTITUDE OF WORKING WOMEN TOWARDS STOCK MARKET” is a record of research work jointly done by Kumari ASWATHY P.R Kumari ASWATHY RAJEEVAN, Kumari AYSHA BEEVI C.H, Kumari FARHANA MUHAMMED in partial fulfillment of the requirement of the DEGREE OF BACHELOR OF COMMERCE under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for award in other similar title of recognition.

  
Anandhi R.

Internal project guide



Head of the Department

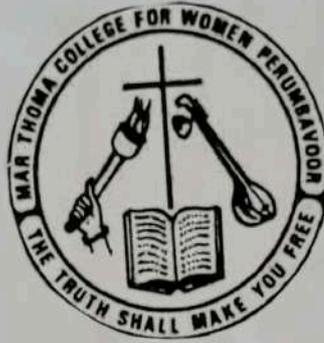


External examiner:

Date: 16/05/2022.

[Type text]

DEPARTMENT OF COMMERCE  
MARTHOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



PRINCIPALS CERTIFICATE

This is to certify that the project entitled "A STUDY ON AWARENESS AND ATTITUDE OF WORKING WOMEN TOWARDS STOCK MARKET" has been completed by Kumari. ASWATHY P.R(190021075600), Kumari,ASWATHY RAJEEVAN(190021075601)Kumari, AYSHA BEEVI C.H (190021075602),Kumari FARHANA MUHAMMED (190021075603) under the guidance of Mrs.Anandhi R.

Dr. SUJO MARY VARGESE  
PRICIPAL

Dr. SUJO MARY VARGHESE  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



**“WORK LIFE AT OFFICE BEFORE AND AFTER COVID-19”**

A dissertation submitted to

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHLOR OF COMMERCE**

Submitted by

**APARNA ELDHOSE(190021075615)**

**AMINA LATHEEF(190021075614)**

**SONA SURESH(190021075612)**

**THARA POULOSE(190021075613)**

Under the guidance of

**Mrs ANANDHI . R**



**DEPARTMENT OF COMMERCE**

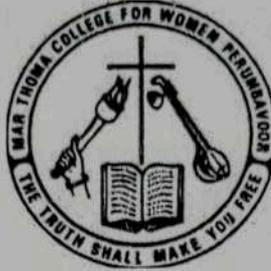
**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019-2022**

DEPARTMENT OF COMMERCE

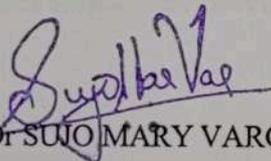
MAR THOMA COLLEGE FOR WOMEN

PERUMBAVOOR



PRINCIPAL'S CERTIFICATE

This is to certify that the project entitled " **WORK LIFE AT OFFICE BEFORE AND AFTER COVID-19**", has been completed by kumari. **APARNA ELDHOSE(190021075615)**, kumari. **AMINA LATHEEF(190021075614)**, kumari. **SONA SURESH(190021075612)**, kumari. **THARA POULOSE(190021075613)** under the guidance of **Mrs. Anandhi .R**

  
DR SUJO MARY VARGHESE

PRINCIPAL

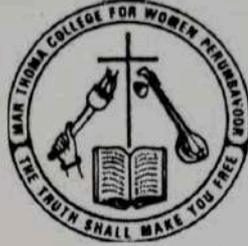
DR. SUJO MARY VARGHESE  
Principal - In - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



DEPARTMENT OF COMMERCE

MAR THOMA COLLEGE FOR WOMEN

PERUMBAVOOR



CERTIFICATE

This is to certify that the project entitled “ **WORK LIFE AT OFFICE BEFORE AND AFTER COVID-19**” is a record of research work jointly done by **kumari. APARNA ELDHOSE, kumari. AMINA LATHEEF, kumari. SONA SURESH, kumari. THARA POULOSE**, in partial fulfilment of the requirement of the **Degree of Bachelor of Commerce** under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

Internal Project Guide

Anandhi R .

Head Of Department

**A STUDY ON RELATIONSHIP BETWEEN INVESTORS  
PERSONAL ATTRIBUTES AND INVESTMENT  
PERCEPTIONS TOWARDS MUTUAL FUND INVESTMENT  
WITH SPECIAL REFERENCE TO WARD 3 IN  
PERUMBAVOOR MUNICIPALITY**

A dissertation submitted to

**MAHATHMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**SHIFANA C.U(190021075621)**

**SIMILU SAJI (190021075622)**

**SIMNA ABDUL KAREEM(190021075623)**

**SONA JOY(190021075624)**

Under the guidance of

**Mrs. Reshmi C J**

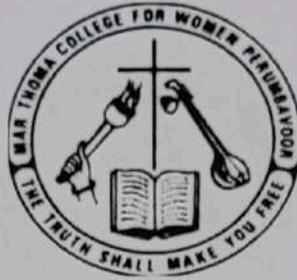


**DEPARTMENT OF COMMERCE**

**MARTHOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019-2022**

**DEPARTMENT OF COMMERCE**  
**MARTHOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**



**CERTIFICATE**

This is to certify that the project entitled **“A STUDY ON RELATIONSHIP BETWEEN INVESTORS PERSONAL ATTRIBUTES AND INVESTMENT PERCEPTIONS TOWARDS MUTUAL FUND INVESTEMENT WITH SPECIAL REFERENCE TO WARD 3 IN PERUMBAVOOR MUNICIPALITY”** is a record of research work jointly done by **Kumari.SHIFANA C.UKumari.SIMLU SAJI, Kumari.SONA JOY, Kumari SIMNA ABDUL KAREEM** in partial fulfillment of the requirement of the **DEGREE OF BACHELOR OF COMMERCE** under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for award in other similar title of recognition.

Internal project guide

*Reshmi. C.J.*

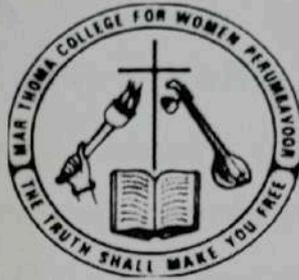
*Saritha*

External examiner

Date: *16/5/22.*

*Saritha*  
Head of the Department

**DEPARTMENT OF COMMERCE**  
**MARTHOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**



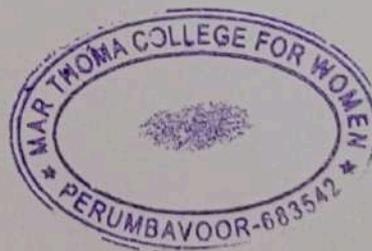
**PRINCIPALS CERTIFICATE**

This is to certify that the project entitled "A STUDY ON THE RELATIONSHIP BETWEEN INVESTORS PERSONAL ATTRIBUTES AND INVESTMENT PERCEPTION TOWARDS MUTUAL FUND INVESTMENT WITH SPECIAL REFERENCE TO WARD 3 IN PERUMBAVOOR MUNICIPALITY" has been completed by Kumari. SHIFANA C.U(190021075621), Kumar. SIMILU SAJI(190021075622) Kumari SIMNA ABDUL KAREEM(190021075623), Kumari. SONA JOY(190021075624) under the guidance of Mrs. RESHMI C J.

**Dr. SUJO MARY VARGESE**

PRICIPAL

**DR. SUJO MARY VARGESE**  
Principal - In - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



**A STUDY OF CONSUMER PERCEPTION TOWARDS E-PAYMENT WITH SPECIAL  
REFERENCE TO GOOGLE PAY IN WARD 17 ,PERUMBAVOOR MUNICIPALITY**

A dissertation submitted to

**MAHATHMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfillment of the requirement for the award of

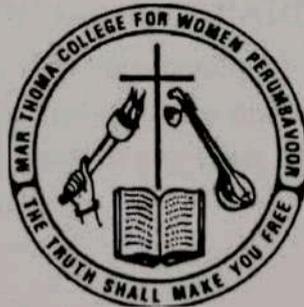
**BACHELOR OF COMMERCE**

Submitted by

<b>ALFIYA K ALI</b>	<b>(190021075597)</b>
<b>AJINA MAHIN</b>	<b>(190021075596)</b>
<b>APARNA SHIVAN</b>	<b>(190021075599)</b>
<b>ANCY GEORGE</b>	<b>(190021075598)</b>

Under the guidance of

Mrs. Saritha N



**DEPARTMENT OF COMMERCE**

**MARTHOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019-2022**

DEPARTMENT OF COMMERCE  
MARTHOMA COLLEGE FOR WOMEN



CERTIFICATE

This is to certify that the project entitled “A STUDY OF CONSUMER PERCEPTION TOWARDS E-PAYMENT WITH SPECIAL REFERENCE TO GOOGLE PAY IN WARD 17,PERUMBAVOOR MUNICIPALITY” is a record of research work jointly done by kumari .ALFIYA K ALI, kumari .AJINA MAHIN, kumari .APARNA SHIVAN, kumari .ANCY GEORGE in partial fulfillment of the requirement of the DEGREE OF BACHELOR OF COMMERCE under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for award in other similar title of recognition.

*Saritha*  
Internal project guide

*Saritha*  
Head of the Department

*Saritha*  
External examiner

Date:

DEPARTMENT OF COMMERCE  
MARTHOMA COLLEGE FOR  
WOMENPERUMBAVOOR



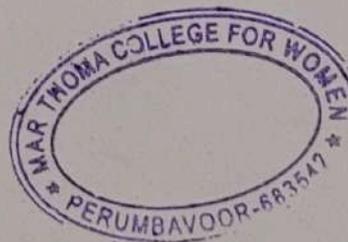
PRINCIPALS CERTIFICATE

This is to certify that the project entitled "A STUDY OF CONSUMER PERCEPTION TOWARDS E-PAYMENT WITH SPECIAL REFERENCE TO GOOGLE PAY IN WARD 17,PERUMBAVOOR MUNICIPALITY" has been completed by kumari .ALFIYA K ALI, kumari .AJINA MAHIN, kumari.APARNA SHIVAN, kumari .ANCY GEORGE under the guidance of Mrs. Saritha N

Dr. SUJO MARY VARGESE

PRINCIPAL

Dr. SUJO MARY VARGESE  
Principal - In-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



# DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN THE MARKET

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



Valued  
*[Signature]*  
16/5/22

ANUSREE ANIL -190021027292

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN THE MARKET " done by ANUSREE ANIL, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

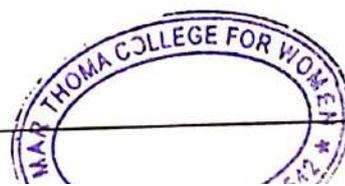
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN THE MARKET

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



MANYA MANOJ -190021027301

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*[Signature]*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry

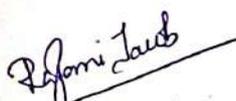


## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN THE MARKET " done by MANYA MANOJ, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Project Guide

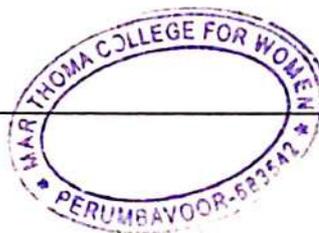
  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



  
Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN THE MARKET

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



FATHIMA K Y -190021027296

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*[Signature]*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN THE MARKET " done by FATHIMA KY, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

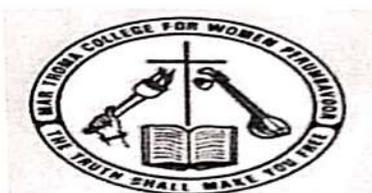
Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARISON OF ACID CONTENT AND QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENT IN VARIOUS FRUITS AND VEGETABLES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



KRIPA ELSA KURIAN -190021027300

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR  
MARCH 2022



Valued  
*[Signature]*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

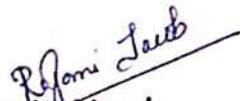
Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARISON OF ACID CONTENT AND QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENT IN VARIOUS FRUITS AND VEGETABLES" done by KRIPA ELSA KURIAN, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

  
Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARISON OF ACID CONTENT AND QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENT IN VARIOUS FRUITS AND VEGETABLES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



AFLA ALI -190021027288

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022

Valued  
AFLA  
16/5/22



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARISON OF ACID CONTENT AND QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENT IN VARIOUS FRUITS AND VEGETABLES " done by AFLA ALI, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

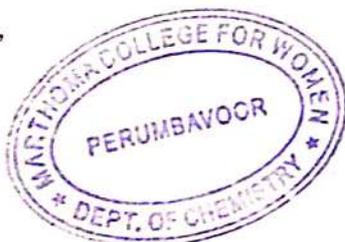
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARATIVE STUDY OF AMOUNT OF ACETIC ACID IN DIFFERENT TYPES OF VINEGAR AND IDENTIFICATION OF ADULTERATION IN DIFFERENT TYPES OF VINEGAR

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



ABEEBA ALI -190021027287

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
Date  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARATIVE STUDY OF AMOUNT ACETIC ACID IN DIFFERENT TYPES OF VINEGAR AND IDENTIFICATION OF ADULTERATION IN DIFFERENT TYPES OF VINEGAR " done by ABEEBA ALI, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARATIVE STUDY OF AMOUNT OF ACETIC ACID IN DIFFERENT TYPES OF VINEGAR AND IDENTIFICATION OF ADULTERATION IN DIFFERENT TYPES OF VINEGAR

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



VINAYA A M -190021027286

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

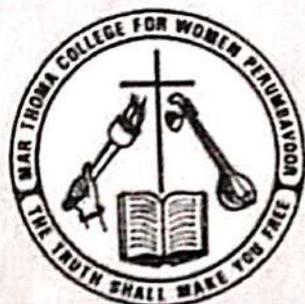
MARCH 2022

Valued  
Date  
16/5/22



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARATIVE STUDY OF AMOUNT ACETIC ACID IN DIFFERENT TYPES OF VINEGAR AND IDENTIFICATION OF ADULTERATION IN DIFFERENT TYPES OF VINEGAR " done by VINAYA A M, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

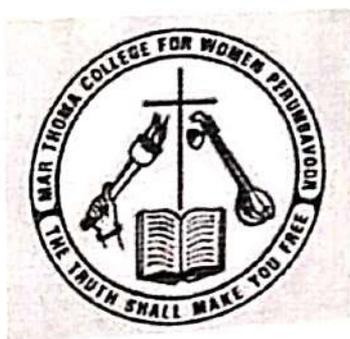
Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARATIVE STUDY OF AMOUNT OF ACETIC ACID IN DIFFERENT TYPES OF VINEGAR AND IDENTIFICATION OF ADULTERATION IN DIFFERENT TYPES OF VINEGAR

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



ALFIYA ALIYAR -190021027289

Department of Chemistry

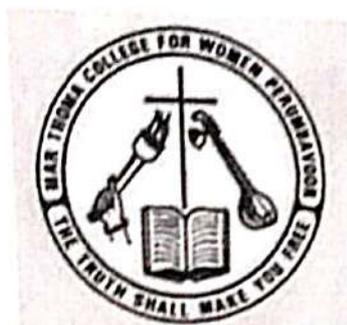
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR  
MARCH 2022

Valued  
Date  
16/5/2022



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

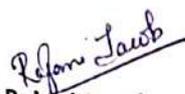
Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARATIVE STUDY OF AMOUNT ACETIC ACID IN DIFFERENT TYPES OF VINEGAR AND IDENTIFICATION OF ADULTERATION IN DIFFERENT TYPES OF VINEGAR " done by ALFIYA ALIYAR, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

  
Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN MARKET

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



NARMADA M -190021027281

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

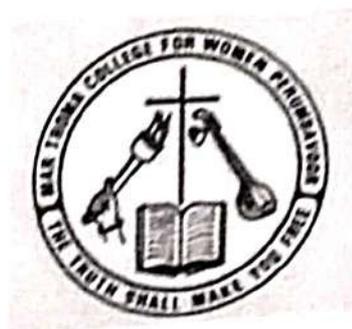
MARCH 2022

*Valued*  
*[Signature]*  
*16/5/22*



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN THE MARKET " done by NARMADA M, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

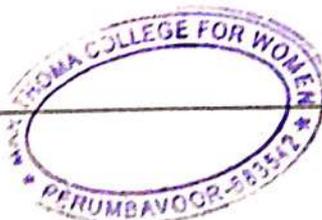
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN MARKET

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.

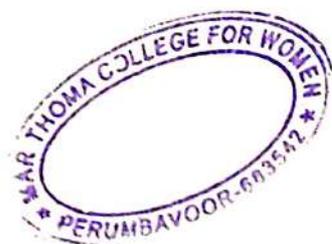


MANYA MANOJ -190021027301

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR  
MARCH 2022

Valued  
*[Signature]*  
16/5/22



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF THE CONTENTS OF SOFT DRINKS AVAILABLE IN THE MARKET" done by MANYA MANOJ, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

  
Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF CATIONS AND ANIONS PRESENT IN DIFFERENT SAMPLES OF TOOTH PASTES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



AJUMUNNISA P A -190021027273

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
Clerk  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF CATIONS AND ANIONS PRESENT IN DIFFERENT SAMPLES OF TOOTH PASTES" done by AJUMUNNISA P A, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

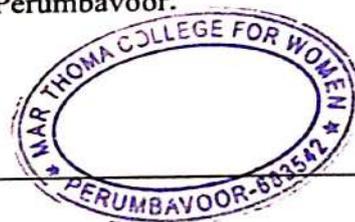
Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF CATIONS AND ANIONS PRESENT IN DIFFERENT SAMPLES OF TOOTH PASTES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



ASHIYA SHAJI -190021027274

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
O/S  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF CATIONS AND ANIONS PRESENT IN DIFFERENT SAMPLES OF TOOTH PASTES " done by ASHIYA SHAJI , submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

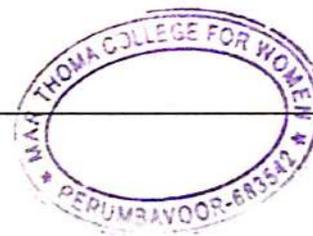
Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF CATIONS AND ANIONS PRESENT IN DIFFERENT SAMPLES OF TOOTH PASTES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



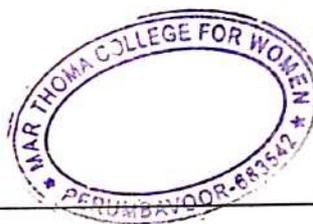
ROUFATH SHAJI -190021027307

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022

Valued  
Date  
16/3/22



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF CATIONS AND ANIONS PRESENT IN DIFFERENT SAMPLES OF TOOTH PASTES " done by ROUFATH SHAJI, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

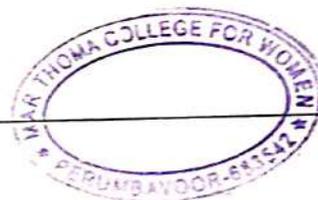
Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# A STUDY ON ADULTERANTS IN FOOD

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



DONA PATHROSE -190021027278

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
O/S  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "A STUDY ON ADULTERANTS IN FOOD " done by DONA PATHROSE, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# A STUDY ON ADULTERANTS IN FOOD

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



SAHALA KHALID -190021027308

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*C.K.S.*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "A STUDY ON ADULTERANTS IN FOOD " done by SAHALA KHALID, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science In Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

*Rajani Jacob*

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

*Aiswariya K R*

Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# A STUDY ON ADULTERANTS IN FOOD

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



SAIFUNISA M A - 190021027305

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
C/te  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "A STUDY ON ADULTERANTS IN FOOD " done by SAIFUNISA M A , submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARISON OF NEUTRALIZING CAPACITIES OF DIFFERENT COMMERCIAL ANTACIDS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.

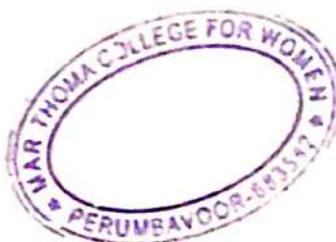


AMRUTHALAKSHMI MOHANAN -190021027291

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
O/S  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARISON OF NEUTRALIZING CAPACITIES OF DIFFERENT COMMERCIAL ANTACIDS " done by AMRUTHALAKSHMI MOHANAN, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

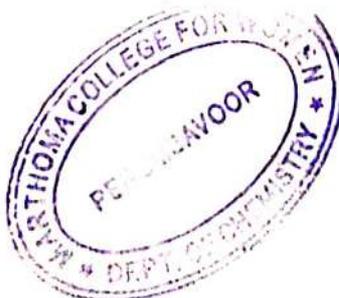
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARISON OF NEUTRALIZING CAPACITIES OF DIFFERENT COMMERCIAL ANTACIDS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



FATHIMA SHERIN M A -190021027295

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
Date  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARISON OF NEUTRALIZING CAPACITIES OF DIFFERENT COMMERCIAL ANTACIDS " done by FATHIMA SHERIN M A, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

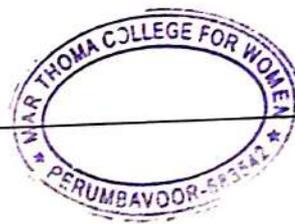
  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

  
Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARISON OF NEUTRALIZING CAPACITIES OF DIFFERENT COMMERCIAL ANTACIDS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



MEENU MOHAN -190021027302

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



*Valued*  
*[Signature]*  
*16/5/22*

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARISON OF NEUTRALIZING CAPACITIES OF DIFFERENT COMMERCIAL ANTACIDS " done by MEENU MOHAN, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. AISWARIYA K R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

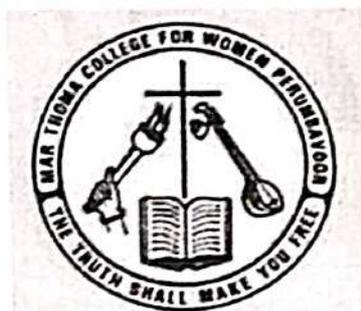
Ms. AISWARIYA K R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF ACID VALUES OF DIFFERENT OILS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



ASMA YOOSAF - 190021027293

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

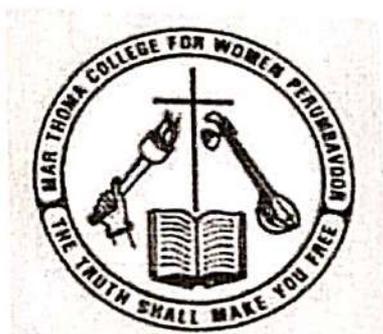
MARCH 2022



Valued  
Date  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled " DETERMINATION OF ACID VALUES OF DIFFERENT OILS " done by ASMA YOOSAF, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr.Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr.Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Dr.Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# A STUDY ON VARIOUS CHEMICAL FACTORS AFFECTING TEA FLAVOURS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



NIVEDITHA A K -190021027304

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*[Signature]*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "A STUDY ON VARIOUS CHEMICAL FACTORS AFFECTING TEA FLAVOURS" done by NIVEDITHA A K, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. ANEETTA VARGHESE Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By



Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide



Ms. Aneetta Varghese

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# ANALYSIS OF OILS: DETERMINATION OF CHEMICAL CONSTANTS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



REMEESA PARVIN - 190021027306

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022

*Valued  
Date  
16/5/22*



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

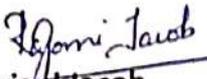
Department of Chemistry



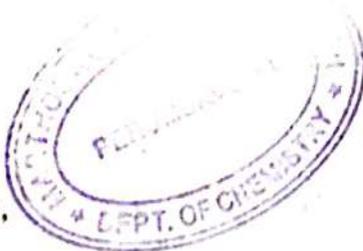
## CERTIFICATE

This is to certify that the project work entitled "ANALYSIS OF OILS: DETERMINATION OF CHEMICAL CONSTANTS" done by Ms. REMEESA PARVIN, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. ANEETTA VARGHESE Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide



Ms. Aneetta Varghese

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# ANALYSIS OF OILS: DETERMINATION OF CHEMICAL CONSTANTS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



VICTORIYA SELVI J -190021027311

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

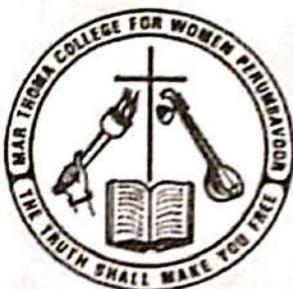
MARCH 2022



Valued  
Date  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "ANALYSIS OF OILS: DETERMINATION OF CHEMICAL CONSTANTS " done by VICTORIYA SELVI J, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. ANEETTA VARGHESE Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Project Guide

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Ms. Anetta Varghese

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# ANALYSIS OF OILS: DETERMINATION OF CHEMICAL CONSTANTS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



SOWMIYA K -190021027312

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*[Signature]*  
16/5/22

**MAR THOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**  
**Department of Chemistry**



**CERTIFICATE**

This is to certify that the project work entitled "ANALYSIS OF OILS: DETERMINATION OF CHEMICAL CONSTANTS " done by **SOWMIYA K**, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of **Ms. ANEETTA VARGHESE** Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

**Forwarded By**

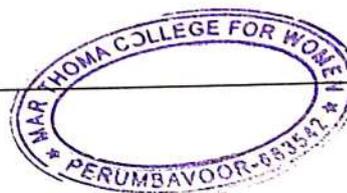
**Dr. Rajani Jacob**

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

**Project Guide**

**Ms. Aneetta Varghese**

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# A STUDY ON VARIOUS CHEMICAL FACTORS AFFECTING TEA FLAVOURS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



PARVATHY M A -190021027305

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
O/S  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

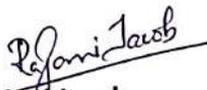
Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "A STUDY ON VARIOUS CHEMICAL FACTORS AFFECTING TEA FLAVOURS" done by PARVATHY M A, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. ANEETTA VARGHESE Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

  
Ms. Aneetta Varghese

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# A STUDY ON VARIOUS CHEMICAL FACTORS AFFECTING TEA FLAVOURS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



MINCIYA UMMAR -190021027303

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
Date  
16/15/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "A STUDY ON VARIOUS CHEMICAL FACTORS AFFECTING TEA FLAVOURS " done by MINCIYA UMMAR , submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. ANEETTA VARGHESE Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide



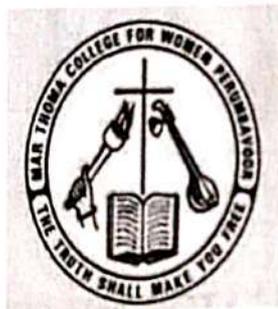
Ms. Aneetta Varghese

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# PHYTOCHEMICAL ANALYSIS AND EXTRACTION OF TRIMYRISTIN FROM MYRISTICA FRAGRANS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



AATHIRA A KUMAR -190021027271

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

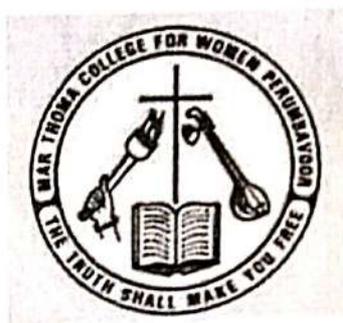
MARCH 2022

Valued  
Date  
16/3/22



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

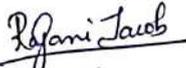
Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "PHYTOCHEMICAL ANALYSIS AND EXTRACTION OF TRIMYRISTIN FROM MYRISTICA FRAGRANS" done by AATHIRA A KUMAR, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. ANEETTA VARGHESE Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

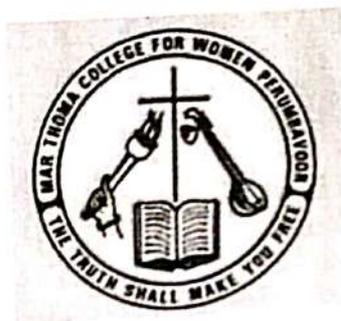
  
Ms. Aneetta Varghese

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# PHYTOCHEMICAL ANALYSIS AND EXTRACTION OF TRIMYRISTIN FROM MYRISTICA FRAGRANS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



ABHIRAMI T A -190021027272

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

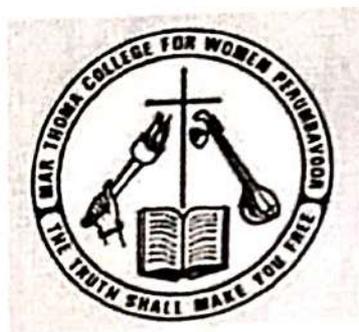
MARCH 2022



Valued  
*[Signature]*  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "PHYTOCHEMICAL ANALYSIS AND EXTRACTION OF TRIMYRISTIN FROM MYRISTICA FRAGRANS " done by ABHIRAMI T A, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. ANEETTA VARGHESE Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

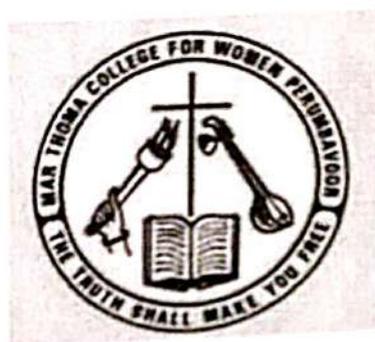
Ms. Aneetta Varghese

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# PHYTOCHEMICAL ANALYSIS AND EXTRACTION OF TRIMYRISTIN FROM MYRISTICA FRAGRANS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



ASWATHI K S -190021027276

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

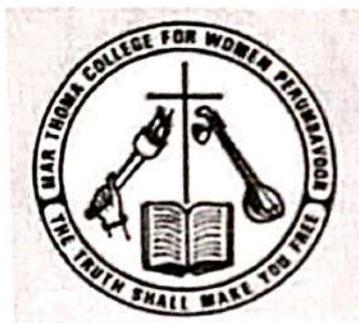
MARCH 2022



Valued  
Ch  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

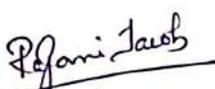
Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "PHYTOCHEMICAL ANALYSIS AND EXTRACTION OF TRIMYRISTIN FROM MYRISTICA FRAGRANS " done by ASWATHI K S, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. ANEETTA VARGHESE Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

  
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

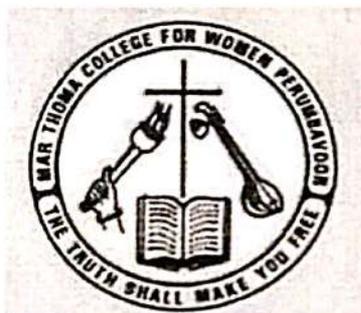
  
Ms. Anetta Varghese

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF ACID VALUES OF DIFFERENT OILS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



RINSA K K - 190021027284

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

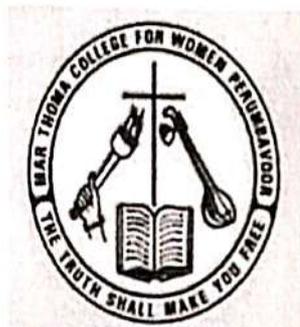
MARCH 2022



Valued  
*[Signature]*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF ACID VALUES OF DIFFERENT OILS" done by RINSA K K, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr.Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr.Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Dr.Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# DETERMINATION OF ACID VALUES OF DIFFERENT OILS

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



THASNEEM ABDUL RASHEED- 190021027310

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
OAS  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "DETERMINATION OF ACID VALUES OF DIFFERENT OILS" done by THASNEEM ABDUL RASHEED, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr.Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

Dr. Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# PREPARATION OF RAYON FROM FILTER PAPER

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



ATHEENA SEBASTIAN - 190021027277

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*AK*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "PREPARATION OF RAYON FROM FILTER PAPER" done by ATHEENA SEBASTIAN, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr.Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

*Rajani Jacob*

Dr.Rajani Jacob

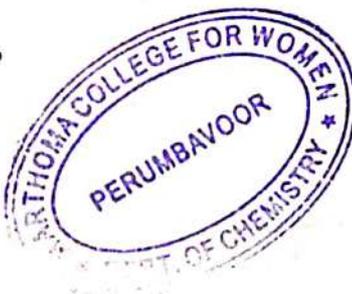
Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

*Rakhi*

Dr.Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# PREPARATION OF RAYON FROM FILTER PAPER

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



MARIYA VINCENT - 190021027279

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*AK*  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "PREPARATION OF RAYON FROM FILTER PAPER" done by **MARIYA VINCENT**, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of **Dr.Rakhi R** Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr.Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.



Project Guide

Dr.Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# PREPARATION OF RAYON FROM FILTER PAPER

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



KADEEJA C S - 190021027298

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*[Signature]*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "PREPARATION OF RAYON FROM FILTER PAPER" done by **KADEEJA CS**, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of **Dr. Rakhi R** Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

**Dr. Rajani Jacob**

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

**Dr. Rakhi R**

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENTS FROM SELECTED FRUITS AND VEGETABLES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



FATHIMA SAFRIN P A- 190021027295

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
OK  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENTS FROM SELECTED FRUITS AND VEGETABLES" done by FATHIMA SAFRIN P A, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr. Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

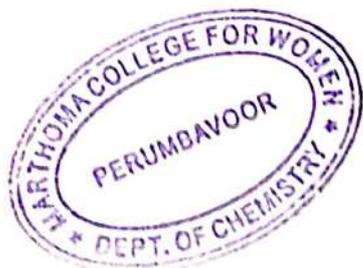
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Dr. Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENTS FROM SELECTED FRUITS AND VEGETABLES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



KHADEEJAMOL P A - 190021027299

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
O/S  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENTS FROM SELECTED FRUITS AND VEGETABLES" done by KHADEEJAMOL P A, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr.Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Dr. Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENTS FROM SELECTED FRUITS AND VEGETABLES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.

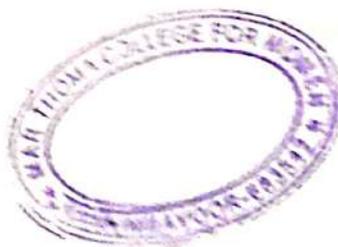


NURJAHAN P J - 190021027282

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
Date  
16/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENTS FROM SELECTED FRUITS AND VEGETABLES" done by NURJAHAN P J, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr.Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Dr. Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for. Women  
Perumbavoor.



# ANALYSIS OF HONEY

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



PARVATHY VENU -190021027283

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

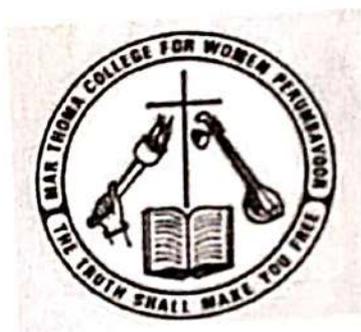
MARCH 2022



Valued  
AS  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "ANALYSIS OF HONEY" done by PARVATHY VENU, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr. Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

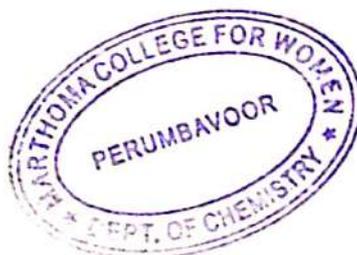
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Dr. Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# ANALYSIS OF HONEY

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



SUMAYYA S ALI -190021027309

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*[Signature]*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "ANALYSIS OF HONEY" done by, **SUMAYYA S ALI** submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of **Dr.Rakhi R** Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

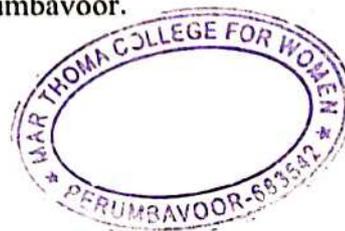
**Dr.Rajani Jacob**

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

**Dr.Rakhi R**

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# ANALYSIS OF HONEY

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



JENNET WILSON -190021027297

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
*AK*  
16/5/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "ANALYSIS OF HONEY" done by JENNET WILSON, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr. Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

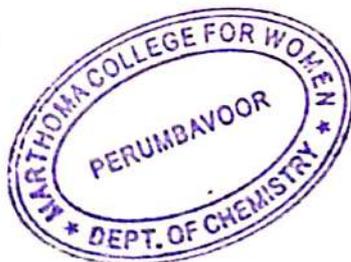
Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Dr. Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# ANALYSIS OF HONEY

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN  
CHEMISTRY.



NADHIYA KOCHUMON - 190021027280

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022



Valued  
Date  
18/3/22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "ANALYSIS OF HONEY" done by NADHIYA KOCHUMON, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Dr.Rakhi R Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

*Rajani Jacob*  
Dr.Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

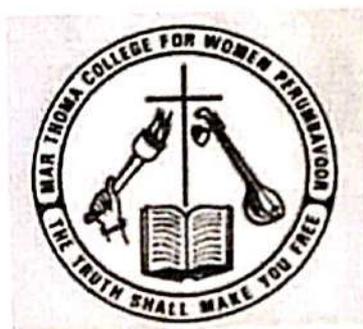
*Rakhi*  
Dr.Rakhi R

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# COMPARISON OF ACID CONTENT AND QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENT IN VARIOUS FRUITS AND VEGETABLES

PROJECT REPORT SUBMITTED TO MAHATMA GANDHI UNIVERSITY, KOTTAYAM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR SCIENCE IN CHEMISTRY.



ALINSHA ALIYAR -190021027290

Department of Chemistry

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

MARCH 2022

Valued  
*Alte*  
16/5/22



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

Department of Chemistry



## CERTIFICATE

This is to certify that the project work entitled "COMPARISON OF ACID CONTENT AND QUALITATIVE CHEMICAL ANALYSIS OF IMPORTANT NUTRIENT IN VARIOUS FRUITS AND VEGETABLES" done by ALINSHA ALIYAR, submitted to Mahatma Gandhi University in partial fulfillment for the degree of Bachelor of Science in Chemistry under the guidance of Ms. RESHMA MATHEW Mar Thoma College For Women, Perumbavoor during the academic year 2019 - 2022.

Forwarded By

Dr. Rajani Jacob

Head of Department In charge  
Dept. of Chemistry  
Mar Thoma College for Women,  
Perumbavoor.

Project Guide

Ms. RESHMA MATHEW

Guest lecturer  
Dept. of Chemistry  
Mar Thoma College for, Women  
Perumbavoor.



# FINITE AUTOMATA AND LANGUAGES

Project Work Submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of requirement for the degree of

**B.Sc. MATHEMATICS**

BY

**ANUCHANDRA SANTHOSH**

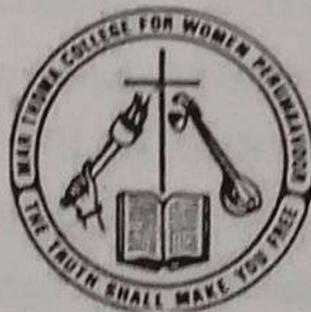
**190021035894**

**STELLA MARIYA ROY**

**190021035902**

**SHIFNA SHAJI**

**190021035912**



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

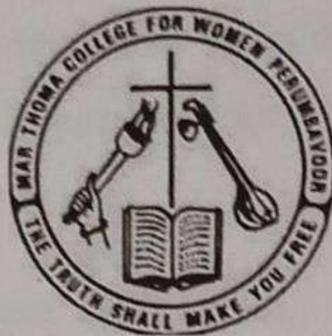
(Affiliated to Mahatma Gandhi University, Kottayam)

**2019-2022**

MAR THOMA COLLEGE FOR WOMEN

PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam)



**CERTIFICATE**

This is to certify that the project entitled "FINITE AUTOMATA AND LANGUAGES" is the bona-fide record of the work done by ANUCHANDRA SANTHOSH(190021035894), STELLA MARIYA ROY (190021035902) and SHIFNA SHAJI (190021035912) in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic year 2019-2022.

Viva Voice Examination Held On ..17/05/2022.....

*Gigi George*

Project Guide

Dr. Gigi George

Head of Department

Dr. Gigi George

*Alonais*

External

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 543

# TOPOLOGY

Project Work Submitted to

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

In partial fulfillment of Requirement for the Degree of

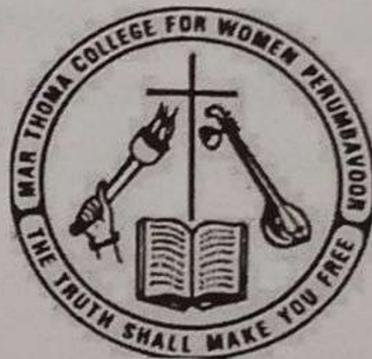
B.Sc. MATHEMATICS

BY

ANJANA P J 190021035893

FATHIMA ABDHUL AZEEZ 190021035908

FATHIMA MOHAMMED 190021035909



DEPARTMENT OF MATHEMATICS

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

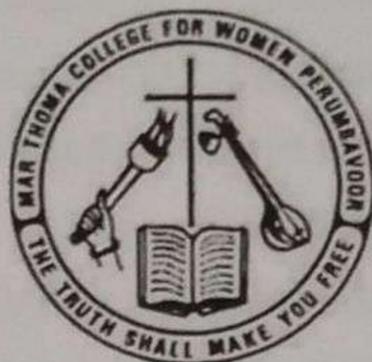
*(Affiliated to Mahatma Gandhi University, Kottayam)*

2019-2022

# MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam)

## DEPARTMENT OF MATHEMATICS



### CERTIFICATE

This is to certify that the project entitled "TOPOLOGY" is the bonafide record of work done by ANJANA PJ(190021035893), FATHIMA ABDUL AZEEZ(190021035908), FATHIMA MOHAMMED(190021035909) in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2019-2022

Viva Voice Examination held on.....17/05/2022.....

Project Guide

Ms. Silvey Paul

Head of the Department

Dr. Gigi George

External

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 543

# MATCHINGS AND FACTORS

Project Work Submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of requirement for the degree of

**B.Sc. MATHEMATICS**

By

**BHADRA SASIDHARAN**

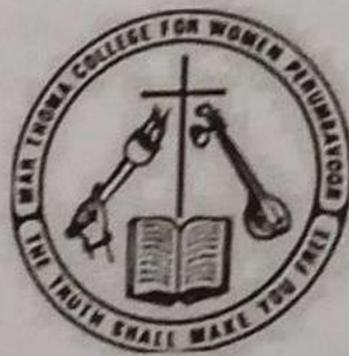
**190021035906**

**SAIEETHA T. J**

**190021035900**

**FATHIMA ALIYA SALIM**

**190021035896**



**DEPARTMENT OF MATHEMATICS  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam)

**2019-2022**

# MAR THOMA COLLEGE FOR WOMEN

## PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam)



### CERTIFICATE

This is to certify that the project entitled "MATCHINGS AND FACTORS" is the Bona-fide record of the work done by BHADRA SASIDHARAN (190021035906), SAIEETHA T. J (190021035900) and FATHIMA ALIYA SALIM (190021035896) in Partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic year 2019-2022.

Viva Voice Examination Held On 17/05/2022

Project Guide

*G. S. Nair*

Mr. Gopikrishna S Nair

Head of Department

*G. George*

Dr. Gigi George

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 642

External

*G. George*

**MYSTERY OF KNOTS**  
**Project Work Submitted to**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

*In partial fulfillment of the Requirements for the Degree*

**B.Sc. MATHEMATICS**

**By**

**ALEESHA RAIHAN M. A - 190021035890**

**PUNYA LALU - 190021035898**

**DHANYA - 190021035907**



**DEPARTMENT OF MATHEMATICS**

**MARTHOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

**(2019-2022)**

MARTHOMA COLLEGE FOR WOMEN

PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



CERTIFICATE

This is to certify that the project entitled  MYSTERY OF KNOTS  is the bonafide record of the work done by ALEESHA RAIHAN M. A – 190021035890, PUNYA LALU – 190021035898, DHANYA – 190021035907 in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic session 2019-2022.

Viva Voce Examination Held On...17/05/2022.....

Project Guide

EMILDA SEBASTIAN

Head of the Department

Dr. GIGI GEORGE

External

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 549



MAR THOMA COLLEGE FOR WOMEN  
PERUMBAAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam)



CERTIFICATE

This is to certify that the project entitled "APPLICATION OF MATHEMATICS IN VARIOUS FIELDS" is the bona-fide record of the work done by ANASWARA ASHOK P (190021035891), ASWATHI RANI (190021035905) and HANNATH E K (190021035910) in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic year 2019-2022.

Viva Voice Examination Held On ..17.10.2022...

*[Signature]*  
Project Guide

Dr. Gigi George

*[Signature]*  
Head of Department

Dr. Gigi George

*[Signature]*  
External

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 688 664

**LATTICES AND BOOLEAN ALGEBRA**

Project Work Submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of requirement for the degree of

**B.Sc.MATHEMATICS**

BY

**RASEENA KAREEM** 190021035899

**SARA MOL SAJAN** 190021035901

**NEHA JOY** 190021035897



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam)

**2019 - 2022**

MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam)



CERTIFICATE

This is to certify that the project entitled "LATTICES AND BOOLEAN ALGEBRAS" is the bona-fide record of the work done by RASEENA KAREEM (190021035899), SARA MOL SAJAN (190021035901), and NEHA JOY (190021035897) in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic year 2019-2022.

Viva Voice Examination Held On. 17.10.2022.....

*Signature*

Project Guide *Signature*

Head of Department

External

Mr. Gopikrishnan

Dr. Gigi George

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 044

# APPLICATION OF MATRICES

Project Work Submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In Partial Fulfillment of Requirement for the Degree of

**B.Sc. MATHEMATICS**

BY

ANITTA SHOJI -190021035904

FARSEENA .N.M -190021035895

STEFY POULOSE -190021035913



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam)

**2019-2022**

**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam)



**CERTIFICATE**

This is to certify that the project entitled "APPLICATION OF MATRICES" is the bona-fide record of the work done by ANITTA SHOJI (190021035904) , FARSEENAN.M (190021035895) and STEFFY POULOSE (190021035913) in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic year 2019-2022.

Viva Voice Examination Held On.....17/05/2022

*[Signature]*  
Project Guide

Ms. Keerthy Kishore A

*[Signature]*  
Head of Department

Dr. Gigi George

*[Signature]*  
External

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 842



**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAAVOOR**

**(Affiliated to Mahatma Gandhi University, Kottayam)**



**CERTIFICATE**

This is to certify that the project entitled "ULAM SPIRAL" is the bona-fide record of the work done by ANGEL ELIZEBETH (190021035892), AKHILA ANN ZACHARIAH (190021035903) and NAJUMA YOUSAF (190021035911) in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic year 2019 - 2022.

Viva Voice Examination Held On ..17.05.2020.....

Project Guide

Ms. Anu Jose

Head of Department

Dr. Gigi George

External

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 549

# LATTICES AND BOOLEAN ALGEBRA

Project Work Submitted to

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

In partial fulfillment of requirement for the degree of

**B.Sc. MATHEMATICS**

BY

RASEENA KAREEM 190021035899

SARA MOL SAJAN 190021035901

NEHA JOY 190021035897



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam)

**2019 - 2022**

MAR THOMA COLLEGE FOR WOMEN

PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam)



CERTIFICATE

This is to certify that the project entitled "LATTICES AND BOOLEAN ALGEBRAS" is the bona-fide record of the work done by RASEENA KAREEM (190021035899), SARA MOL SAJAN (190021035901), and NEHA JOY (190021035897) in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic year 2019-2022.

Viva Voice Examination Held On...13/05/2022...

*Signature*

Project Guide

*Signature*

Head of Department

External

Mr. Gopikrishnan

Dr. Gigi George

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 686 656

**APPLICATION OF MATHEMATICS IN  
VARIOUS FIELDS**

Project Work Submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of requirement for the degree of

**B.Sc. MATHEMATICS**

BY

ANASWARA ASHOK P      190021035891

ASWATHI RANI              190021035905

HANNATH E K                190021035910



**DEPARTMENT OF MATHEMATICS**

**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam)

**2019-2022**

MAR THOMA COLLEGE FOR WOMEN

PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam)



CERTIFICATE

This is to certify that the project entitled "APPLICATION OF MATHEMATICS IN VARIOUS FIELDS" is the bona-fide record of the work done by ANASWARA ASHOK P (190021035891), ASWATHI RANI (190021035905) and HANNATH E K(190021035910) in partial fulfillment of the requirement for the award of B.Sc. MATHEMATICS Degree from Mahatma Gandhi University, Kottayam during the academic year 2019-2022.

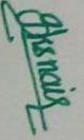
Viva Voice Examination Held On ..17.10.2022.

Project Guide 

Dr. Gigi George

Head of Department 

Dr. Gigi George

External 

Department of Mathematics  
Mar Thoma College for Women  
Perumbavoor - 683 549

**THENMALA ECOTOURISM AND COMMUNITY  
EMPOWERMENT**

Submitted to the

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

**2019-2022**

Submitted by

**FITHA MOL R.N**

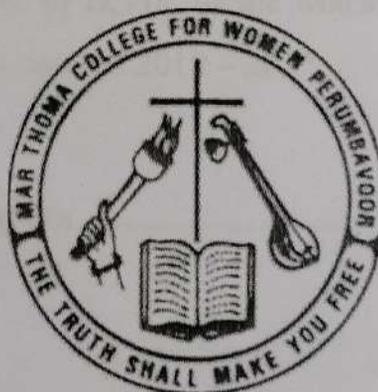
**Reg No: 190041001898**

Under the supervision of

**Mr. Sreekumar N**

**Ms. Treesa Maria Mathew**

**Faculty Guides**



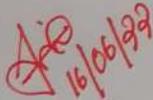
**B.VOC TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

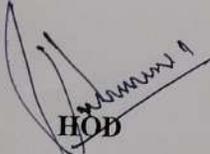
**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR**

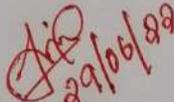
**CERTIFICATE**

This is to certify that the project report entitled “Study of cultural tourism with special reference to Kochi” is the Bonafide work carried out Ms.SOLY VARGHESE (Reg No: 190041001925) under my guidance and supervision during 2019-2022, in partial fulfillment of the requirement for the award of degree of B.Voc Tourism and Hospitality Management under the faculty of B.Voc of the Mahatma Gandhi University, Kottayam during the academic session 2019 – 2022.

Viva Voice Examination Held On .....

  
Project Guide

  
HOD

  
Internal Examiner

  
External Examiner

**CULTURAL TOURISM WITH SPECIAL  
REFERENCE TO KOCHI**

Submitted to the

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**SOLY VARGHESE**

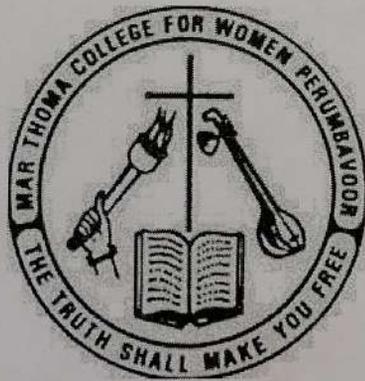
Reg No:190041001925

Under the supervision of

**Mr. Sreekumar. N**

**Ms. Treesa Maria Mathew**

Faculty Guides



**B.VOC TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

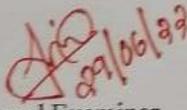
CERTIFICATE

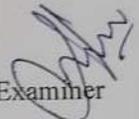
This is to certify that the Project report entitled "Backwater Tourism with special reference to Kumarakom" submitted to the Mahatma Gandhi University by SREELAKSHMI S RAJ in partial fulfillment of the requirement for the award of the degree of B.Voc Tourism and Hospitality Management is a bonafide work carried out under my supervision and guidance.

Viva Voce Examination Held On .....

  
Project Guide

  
HOD

  
Internal Examiner

  
External Examiner

**BACKWATER TOURISM WITH SPECIAL REFERENCE TO KUMARAKOM**

Submitted to the

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**SREELAKSHMI S RAJ**

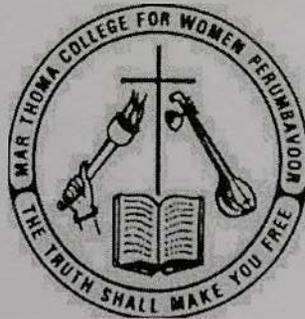
Reg No: 190041001926

Under the supervision of

**Mr. Sreekumar N**

**Ms. Treesa Maria Mathew**

Faculty guides



**B.VOC TOURISM AND HOSPITALITY MANAGEMENT**

**MAR THOMA COLLEGE FOR WOMEN**

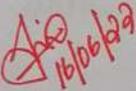
**PERUMBAVOOR**

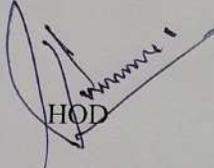
Department of B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

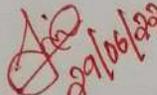
CERTIFICATE

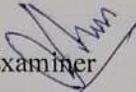
This is to certify that the Project report entitled “Desert tourism special reference to Thar Desert” submitted to the Mahatma Gandhi University by FATHIMATHU SUHARA K T in partial fulfillment of the requirement for the award of degree of B. Voc Tourism and Hospitality Management is a bonafide work carried out under my supervision and guidance.

Viva Voce Examination Held On .....

  
Project Guide

  
HOD

  
External Examiner

  
Internal Examiner

**“DESERT TOURISM WITH SPECIAL REFERENCE TO THAR  
DESERT”**

Submitted to the

**MAHATMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfillment of the requirement for the award of degree of

**B. Voc Tourism and Hospitality Management**

2019-2022

Submitted by

**FATHIMATHU SUHARA K T**

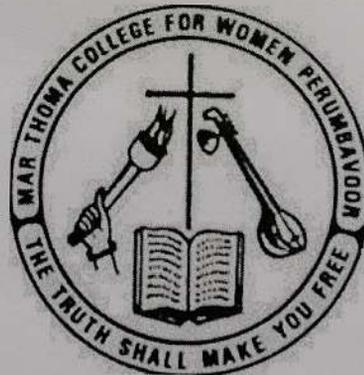
**Reg no: 190041001908**

Under the supervision of

**Mr. Sreekumar N**

**Ms. Treesa Maria Mathew**

Faculty Guides



**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

**“DESERT TOURISM WITH SPECIAL REFERENCE TO THAR  
DESERT”**

Submitted to the

**MAHATMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfillment of the requirement for the award of degree of

**B. Voc Tourism and Hospitality Management**

2019-2022

Submitted by

**FATHIMATHU SUHARA K T**

**Reg no: 190041001908**

Under the supervision of

**Mr. Sreekumar N**

**Ms. Treesa Maria Mathew**

Faculty Guides



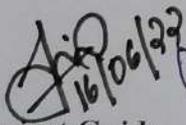
**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

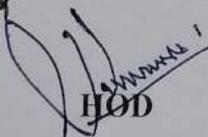
**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

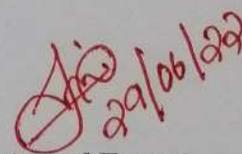
**CERTIFICATE**

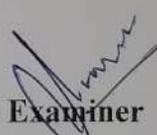
This is to certify that the Project report entitled “**Village Tourism with special reference to Kumbalangi**” submitted to the Mahatma Gandhi University by **ATHIRA P R** in partial fulfillment of the requirement for the award of the degree of B.Voc Tourism and Hospitality Management is a bonafide work carried out under my supervision and guidance.

**Viva Voice Examination Held On:**

  
Project Guide

  
HOD

  
Internal Examiner

  
External Examiner

VHAAAE/10/2000 WITH SPECIAL REFERENCE TO KANDAKALAKKAL

Submitted to the

MADRAS GOVERNMENT UNIVERSITY, KOTTAYAM

in partial fulfillment of the requirement for the award of the degree

B.Voc Tourism and Hospitality Management

Submitted by

AJITHA P K

Reg No: 190601001906

Under the supervision of

Mr. Suresh Kumar N

Ms. Teresa Maria Mathew

Faculty guides



**B.VOC TOURISM AND HOSPITALITY MANAGEMENT**

**MAR THOMA COLLEGE FOR WOMEN**

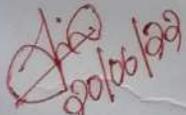
**PERUMBAVOOR**

**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR**

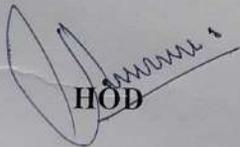
**CERTIFICATE**

This is to certify that the project report entitled -**Study of cultural tourism with special reference to Kochi** is the Bonafide work carried out Ms **PARVATHI V S** (Reg No:190041001921) under my guidance and supervision during 2019-2022, in partial fulfillment of the requirement for the award of degree of B.Voc Tourism and Hospitality Management under the faculty of B.Voc of the Mahatma Gandhi University, Kottayam during the academic session 2019 – 2022.

**Viva Voice Examination Held On .....**

  
20/06/22

**Project Guide**

  
HOD

**Internal Examiner**

**External Examiner**

**CULTURAL TOURISM WITH SPECIAL  
REFERENCE TO KOCHI**

Submitted to the

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**PARVATHI V S**

Reg No:190041001921

**Under the supervision of**

**Mr. Sreekumar. N**

**Ms. Treesa Maria Mathew**

Faculty Guides



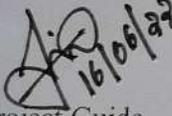
**B.VOC TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

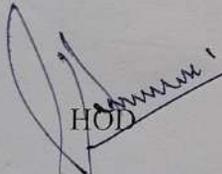
DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

CERTIFICATE

This is to certify that the Project report entitled “**Backwater Tourism with special reference to Kumarakom**” submitted to the Mahatma Gandhi University by **VARSHA RAMAKRISHNAN** in partial fulfillment of the requirement for the award of the degree of B.Voc Tourism and Hospitality Management is a bonafide work carried out under my supervision and guidance.

Viva Voce Examination Held On .....

  
16/06/22  
Project Guide

  
HOD

Internal Examiner

External Examiner

**BACKWATER TOURISM WITH SPECIAL REFERENCE TO KUMARAKOM**

Submitted to the

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**VARSHA RAMAKRISHNAN**

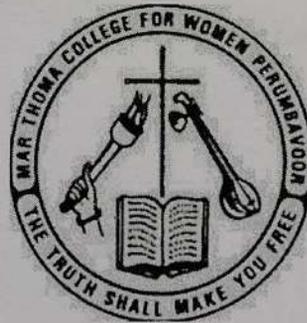
Reg No: 190041001929

Under the supervision of

**Mr. Sreekumar N**

**Ms. Treesa Maria Mathew**

Faculty guides



**B.VOC TOURISM AND HOSPITALITY MANAGEMENT**

**MAR THOMA COLLEGE FOR WOMEN**

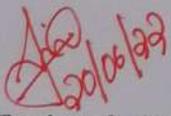
**PERUMBAVOOR**

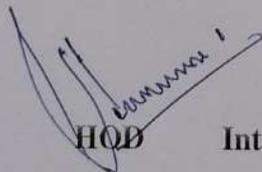
DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

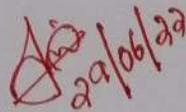
CERTIFICATE

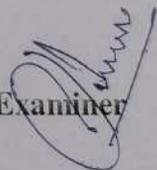
This is to certify that the project report entitled “**Study of Pilgrim tourism with special reference to Malayattor**” is the Bonafide work carried out Ms. NESRIN NAZEER (Reg No: 190041001919) under my guidance and supervision during 2019-2022, in partial fulfillment of the requirement for the award of degree of B.Voc Tourism and Hospitality Management under the faculty of B.Voc of the Mahatma Gandhi University, Kottayam during the academic session 2019 – 2022.

Viva Voice Examination Held On .....

  
Project Guide

  
HOD

  
Internal Examiner

  
External Examiner

PILGRIM TOURISM WITH SPECIAL REFERENCES TO MALAYATTOOR

**A STUDY OF PILGRIM TOURISM WITH SPECIAL REFERENCE TO  
MALAYATTOOR**

Submitted to the

**MAHATHMAGANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**NESRIN NAZEER**

**Rag No:190041001919**

Under the supervision of

**Mr. Sreekumar.N**

**Ms. Treesa Maria Mathew**

**Faculty Guides**



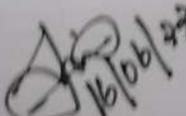
**B.VOC TOURISM AND HOSPITALITY MANAGEMENT  
MARTHOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

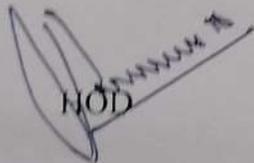
DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

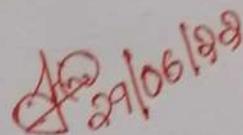
CERTIFICATE

This is to certify that the Project report entitled "Backwater Tourism with special reference to Kumarakom" submitted to the Mahatma Gandhi University by VANDHANA VINOD in partial fulfillment of the requirement for the award of the degree of B.Voc Tourism and Hospitality Management is a bonafide work carried out under my supervision and guidance.

Viva Voce Examination Held On .....

  
Project Guide

  
HOD

  
Internal Examiner

External Examiner

**“BACKWATER TOURISM WITH SPECIAL REFERENCE TO  
KUMARAKOM”**

Submitted to the

**MAHATHMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfillment of the requirement for the award of degree of

**B. Voc Tourism and Hospitality Management**

2019 – 2022

Submitted by

**VANDHANA VINOD**

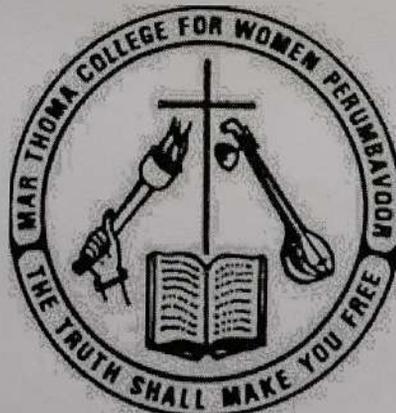
**Reg no: 190041001928**

Under the supervision of

**Mr.. Sreekumar N**

**Ms. Treesa Maria Mathew**

Faculty guide



**DEPARTMENT OF B.VOC**

**TOURISM AND HOSPITALITY MANAGEMENT**

**MAR THOMA COLLEGE FOR WOMENPERUMBAVOOR**

**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

**CERTIFICATE**

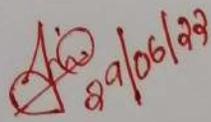
This is to certify that the Project report entitled “**HILL TOURISM WITH SPECIAL REFERENCE TO MUNNAR**” submitted to the Mahatma Gandhi University by KRISHNPRIYA E.S in partial fulfillment of the requirement for the award of the degree of B.Voc Tourism and Hospitality Management is a Bonafide work carried out under my supervision and guidance.

**Viva Voice Examination Held On .....**

  
89/06/23

**Project Guide.**

**HOD.**

  
89/06/23

**Internal examiner**

**External examiner**

**HILL TOURISM WITH SPECIAL REFERENCE TO MUNNAR**

Submitted to the

**MAHATMA GANDHI UNIVERSITY**

**KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree of

**B.Voc Tourism and Hospitality Management**

2019-2022

Submitted by

**KRISHNAPRIYA E.S**

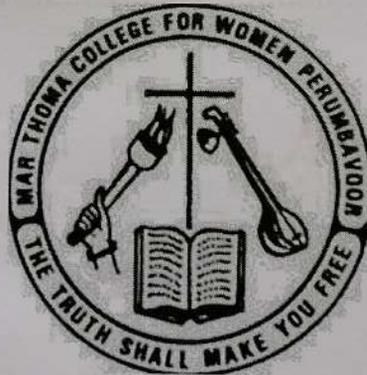
**190041001913**

Under the supervision of

**Mr. Sreekumar. N**

**Ms. Treesa Maria Mathew**

Faculty guides



**B.VOC TOURISM AND HOSPITALITY MANAGEMENT**  
**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**CULTURAL TOURISM WITH SPECIAL  
REFERENCE TO KOCHI**

Submitted to the

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**SHIBINA. K**

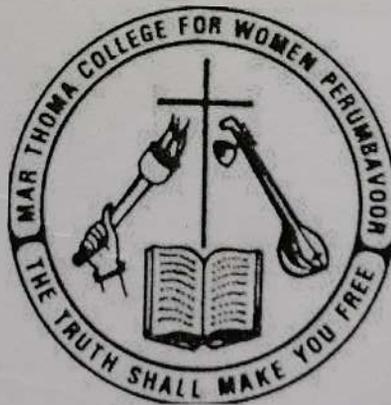
Reg No:190041001924

Under the supervision of

**Mr. Sreekumar. N**

**Ms. Treesa Maria Mathew**

Faculty Guides



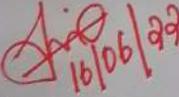
B.VOC TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

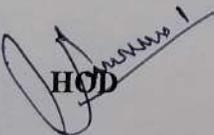
**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR**

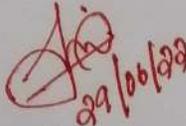
**CERTIFICATE**

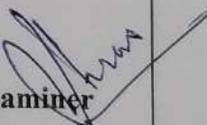
This is to certify that the project report entitled “**Study of cultural tourism with special reference to Kochi**” is the Bonafide work carried out Ms.SAFREENA E S (Reg No: 190041001922) under my guidance and supervision during 2019-2022, in partial fulfillment of the requirement for the award of degree of B.Voc Tourism and Hospitality Management under the faculty of B.Voc of the Mahatma Gandhi University, Kottayam during the academic session 2019 – 2022.

Viva Voice Examination Held On .....

  
16/06/22  
**Project Guide**

  
**HOD**

  
29/06/22  
**Internal Examiner**

  
**External Examiner**

**CULTURAL TOURISM WITH SPECIAL  
REFERENCE TO KOCHI**

Submitted to the

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**SAFREENA E S**

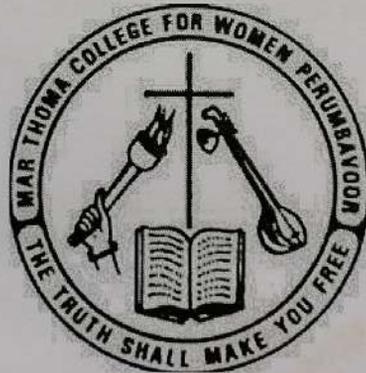
Reg No:190041001922

**Under the supervision of**

**Mr. Sreekumar. N**

**Ms. Treesa Maria Mathew**

Faculty Guides



**B.VOC TOURISM AND HOSPITALITY MANAGEMENT**

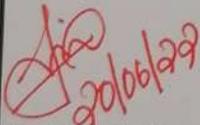
**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

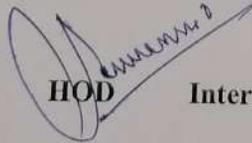
**DEPARTMENT OF B.VOC**  
**TOURISM AND HOSPITALITY MANAGEMENT**  
**MAR THOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**

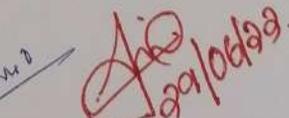
**CERTIFICATE**

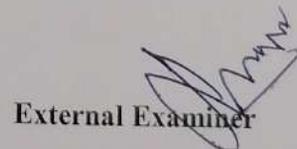
This is to certify that the project report entitled “**Study of Pilgrim tourism with special reference to Malayattor**” is the Bonafide work carried out Ms. MERIN STEPHAN (Reg No: 190041001915) under my guidance and supervision during 2019-2022, in partial fulfillment of the requirement for the award of degree of B.Voc Tourism and Hospitality Management under the faculty of B.Voc of the Mahatma Gandhi University, Kottayam during the academic session 2019 – 2022.

Viva Voice Examination Held On .....

  
Project Guide

  
HOD

  
Internal Examiner

  
External Examiner

**A STUDY OF PILGRIM TOURISM WITH SPECIAL REFERENCE TO  
MALAYATTOOR**

Submitted to the

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**MERIN STEPHAN**

**Rag No:190041001915**

Under the supervision of

**Mr. Sreekumar. N**

**Ms. Treesa Maria Mathew**

**Faculty Guides**



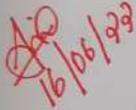
**B.VOC TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

Department of B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

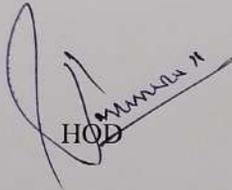
CERTIFICATE

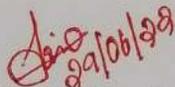
This is to certify that the Project report entitled “Desert tourism special reference to Thar Desert” submitted to the Mahatma Gandhi University by FATHIMA ANJALA in partial fulfillment of the requirement for the award of degree of B. Voc Tourism and Hospitality Management is a bonafide work carried out under my supervision and guidance.

Viva Voce Examination Held On .....

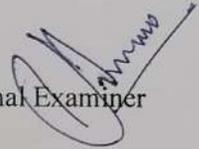
  
16/06/22

Project Guide

  
HOD

  
29/06/22

External Examiner

  
HOD

Internal Examiner

**“DESERT TOURISM WITH SPECIAL REFERENCE TO THAR  
DESERT”**

Submitted to the

**MAHATMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfillment of the requirement for the award of degree of

**B. Voc Tourism and Hospitality Management**

2019-2022

Submitted by

**FATHIMA ANJALA**

**Reg no: 190041001907**

Under the supervision of

**Mr. Sreekumar N**

**Ms. Treesa Maria Mathew**

Faculty Guides



**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

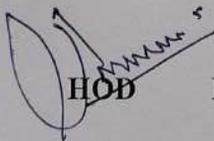
**DEPARTMENT OF B.VOC  
TOURISM AND HOSPITALITY MANAGEMENT  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

**CERTIFICATE**

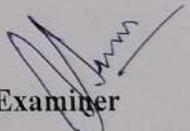
This is to certify that the Project report entitled “**Village Tourism with special reference to Kumbalangi**” submitted to the Mahatma Gandhi University by **ASWATHY ASHOKAN** in partial fulfillment of the requirement for the award of the degree of B.Voc Tourism and Hospitality Management is a bonafide work carried out under my supervision and guidance.

**Viva Voice Examination Held On:**

  
16/06/23  
Project Guide

  
HOD

Internal Examiner

  
External Examiner

**VILLAGE TOURISM WITH SPECIAL REFERENCE TO KUMBALANGI**

Submitted to the

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of the degree

**B.Voc Tourism and Hospitality Management**

Submitted by

**ASWATHY ASHOKAN**

**Reg No: 190041001905**

Under the supervision of

**Mr. Sreekumar N**

**Ms. Treesa Maria Mathew**

Faculty guides



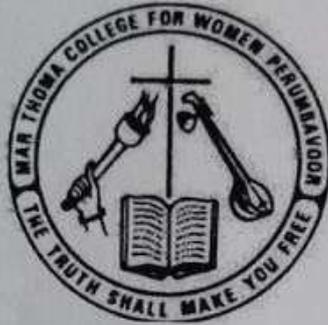
**B.VOC TOURISM AND HOSPITALITY MANAGEMENT**

**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

---

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAAVOOR



B. VOC FASHION TECHNOLOGY AND  
MERCHANDISING

INTERNSHIP I  
GARMENT MAKING UNIT

**Batch: 2020-2023**

---

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)

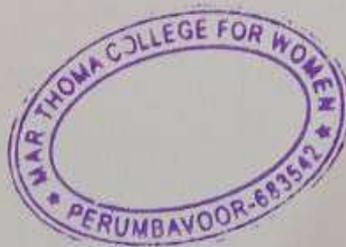
CERTIFICATE

Name of the Candidate : BINITHA VARGHESE  
Register no. : 20004.1001842  
Semester : 2<sup>st</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UNIT)  
Subject code : FTMS9206

Certified that this is a bonafied record practical work done by Ms. BINITHA VARGHESE  
Reg. no. 20004.1001842 under my guidance and supervision during 2020 - 2021, in  
partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technology and  
Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam during the  
academic session 2020 - 2023.

PRACTICAL EXAMINATION HELD ON : 22.08.2022

Internal Examiner



Head of the Department

CHINNU ANITHA JOSEPH

External Examiner

Chinnu A.  
22/8/2022

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)

CERTIFICATE

Name of the Candidate : Sruthi Sreejith  
Register no. : 200041001860  
Semester : 2<sup>st</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UNIT)  
Subject code : FTMS9206

Certified that this is a bonafied record practical work done by Ms. Sruthi Sreejith  
Reg. no. 200041001860 under my guidance and supervision during 2020 - 2021, in  
partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technology and  
Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam during the  
academic session 2020 - 2023.

PRACTICAL EXAMINATION HELD ON : 22/8/22

Internal Examiner

Head of the Department

CHINNU ANITHA JOSEPH

External Examiner

Chinnu J  
22/8/2022

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

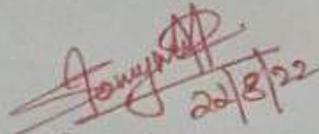
(Affiliated to Mahatma Gandhi University)

CERTIFICATE

Name of the Candidate : SNEHA SUBRAMANYAN  
Register no. : 200041001858  
Semester : 2<sup>nd</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UNIT)  
Subject code : FTMS9206

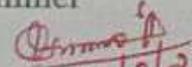
Certified that this is a bonafied record practical work done by Ms. Sneha Subramanyan  
Reg. no. 200041001858... under my guidance and supervision during 2020 - 2021, in  
partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technology and  
Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam during the  
academic session 2020 - 2023.

PRACTICAL EXAMINATION HELD ON : 22-08-2022

  
Internal Examiner

  
Head of the Department

CHINNO ANITA JOSEPH  
External Examiner

  
22/8/2022

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)

CERTIFICATE

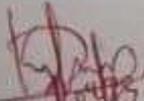
Name of the Candidate : JISNI JALEEL  
Register no. : 200041001849  
Semester : 4<sup>th</sup> Semester  
Subject : INTERNSHIP - II (EXPORT HOUSE)  
Subject code : FTMS406

This is to certify that internship report entitled "INTERNSHIP - 2 -  
EXPORTHOUSE" is the bonafide work carried out by

Ms. Jisni Jaleel Reg. no. 200041001849 under my  
guidance

and supervision during 2020 - 2021, in partial fulfillment of the requirement for the  
award of degree of B. Voc Fashion Technology and Merchandising under the faculty of  
B. Voc Mahatma Gandhi University, Kottayam during the academic session 2020 -  
2023.

PRACTICAL EXAMINATION HELD ON: .....

  
Internal Examiner

  
13/1/23  
Head of the Department

  
12/1/23  
External Examiner MS. SRUTHY MOHAN

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

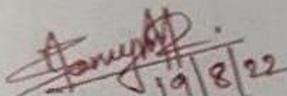
(Affiliated to Mahatma Gandhi University)

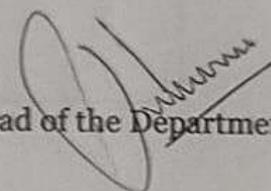
CERTIFICATE

Name of the Candidate : Devika J J  
Register no. : 200041001843  
Semester : 2<sup>st</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UNIT)  
Subject code : FTMS9206

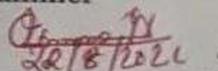
Certified that this is a bonafied record practical work done by Ms. Devika J J  
Reg. no. 200041001843... under my guidance and supervision during 2020 - 2021, in  
partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technology and  
Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam during the  
academic session 2020 - 2023.

PRACTICAL EXAMINATION HELD ON : 22-08-2022

  
Internal Examiner

  
Head of the Department

CHINNO ANIMA JOSEPH  
External Examiner

  
22/8/2022

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

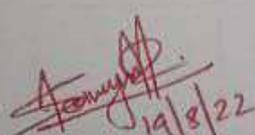
(Affiliated to Mahatma Gandhi University)

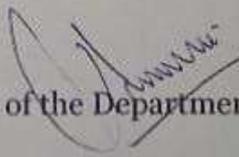
CERTIFICATE

Name of the Candidate : Athulya Venugopal  
Register no. : 200041001841  
Semester : 2<sup>st</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UNIT)  
Subject code : FTMS9206

Certified that this is a bonafied record practical work done by Ms. Athulya Venugopal  
Reg. no. 200041001841 under my guidance and supervision during 2020 - 2021, in  
partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technology and  
Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam during the  
academic session 2020 - 2023.

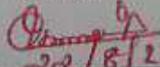
PRACTICAL EXAMINATION HELD ON : .....

  
Internal Examiner

  
Head of the Department

CHINNU ANITA JOSEPH

External Examiner

  
22/8/2022.

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

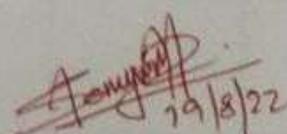
(Affiliated to Mahatma Gandhi University)

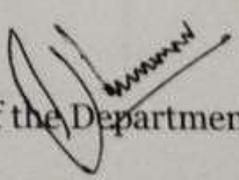
CERTIFICATE

Name of the Candidate : Soumya Ann  
Register no. : 2000411001859  
Semester : 2<sup>nd</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UNIT)  
Subject code : FTMS9206

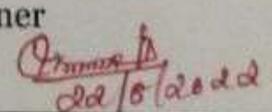
Certified that this is a bonafied record practical work done by Ms. Soumya Ann  
Reg. no. 2000411001859 under my guidance and supervision during 2020 - 2021, in  
partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technology and  
Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam during the  
academic session 2020 - 2023.

PRACTICAL EXAMINATION HELD ON : 22/8/2022

  
Internal Examiner

  
Head of the Department

CHINNU ANITHA JOSEPH  
External Examiner

  
22/8/2022

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

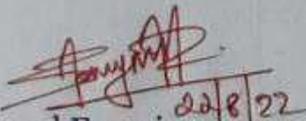
(Affiliated to Mahatma Gandhi University)

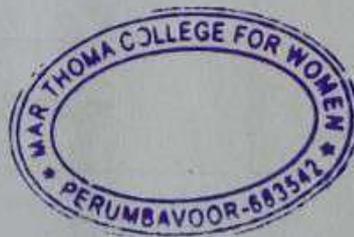
CERTIFICATE

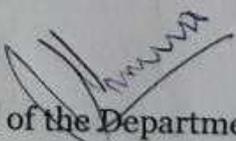
Name of the Candidate : GLOPIKA NV  
Register no. : 200041001847  
Semester : 2<sup>st</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UNIT)  
Subject code : FTMS9206

Certified that this is a bonafied record practical work done by Ms. GLOPIKA NV  
Reg. no. 200041001847 under my guidance and supervision during 2020 - 2021, in  
partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technology and  
Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam during the  
academic session 2020 - 2023.

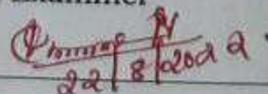
PRACTICAL EXAMINATION HELD ON : 22/8/2022

  
Internal Examiner



  
Head of the Department

CANNON ANITTA JOSEPH  
External Examiner

  
22/8/2022

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)

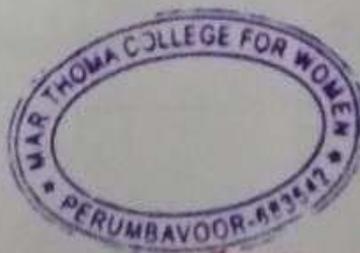
CERTIFICATE

Name of the Candidate : ..... Amala J .....  
Register no. : ..... 200041001835 .....  
Semester : 2<sup>nd</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UNIT)  
Subject code : FTMS9206

Certified that this is a bonafied record practical work done by Ms. Amala J .....  
Reg. no. .... 20041001835 ..... under my guidance and supervision during 2020 - 2021, in  
partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technology and  
Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam during the  
academic session 2020 - 2023.

PRACTICAL EXAMINATION HELD ON : 22/8/2022

Internal Examiner



Head of the Department

CHINNU ANITA JOSEPH

External Examiner

22/8/2022

MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)

CERTIFICATE

Name of the Candidate : ANJANA AJAYAN  
Register no. : 200041001639  
Semester : 2<sup>nd</sup> Semester  
Subject : INTERSHIP I (GARMENT MAKING UP  
Subject code : FTMS9206

It is certified that this is a bonafide record practical work done by Ms. ANJANA AJAYAN  
Register no. 200041001639 under my guidance and supervision during 2020 - 2023  
for the partial fulfillment of the requirement for the award of degree of B. Voc Fashion Technol  
ogy in Merchandising under the faculty of B. Voc Mahatma Gandhi University, Kottayam durin  
g the academic session 2020 - 2023.

PRACTICAL EXAMINATION HELD ON : 22-5-2022

  
Internal Examiner

  
Head of the Department

Chandy Anand Joseph  
External Examiner

22/5/2022

# INTELLECTUAL HISTORY OF PULLUVAZHY

Project Dissertation

Submitted to



The Mahatma Gandhi University in partial fulfilment of the requirements  
for the award of the degree of

**BACHELOR OF ARTS HISTORY,  
ARCHAEOLOGY AND MUSEOLOGY**

2019-2022

**BHAGYA AGNES JAMES**

(Reg. No.190021017743)

*Vahud*  
*16/05/20*

DIYA KALESH	(Reg. No.190021017744)
ELEENA MATHEW	(Reg. No.190021017745)
ANEETA M KURIAN	(Reg. No.190021017738)
KALAVTHY .S	(Reg. No.190021017751)
VRINDA JAYAKUMAR	(Reg. No.190021017760)

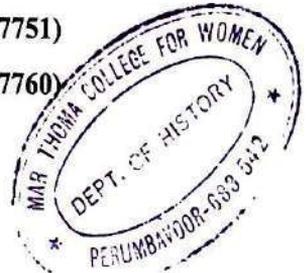
Under the guidance of

**Dr. BIBIN KURIAKOSE**

**DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY**

**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**



**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**



**CERTIFICATE**

This is to certify that this project dissertation entitled **INTELLECTUAL HISTORY OF PULLUVAZHY** is a record of original work done by Ms. **BHAGYA AGNES JAMES** (Reg. No:190021017743 , Ms. **DIYA KALESH** (Reg. No: 190021017744), Ms. **ELEENA MATHEW** (Reg.No:190021017745) Ms. **ANEETA M KURIAN** (Reg. No:190021017738) , Ms. **KALAVATHY.S** (Reg. No:190021017751), and **VRINDA JAYAKUMAR** (Reg. No:190021017760) in partial fulfilment of the requirement for the award of degree of Bachelor of Arts in History, Archaeology and Museology to the Mahatma Gandhi University , Kottayam under the guidance of **Dr. BIBIN KURIAKOSE** Department of History, Archaeology and Museology . It is to certifies that this project report or any part there of has not been submitted elsewhere for any other degree.

Signature:

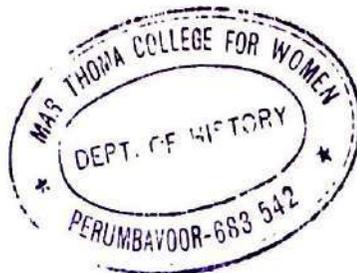
Guide : **Dr. BIBIN KURIAKOSE**  
Department History Archaeology and Museology  
Mar Thoma College for Women Perumbavoor

Signature :

HOD : **Dr. BIBIN KURIAKOSE**  
Department of History Archaeology and Muselogy  
Mar Thoma College for women Perumbavoor

External Examiner

Date : 16/05/2022  
Place: Perumbavoor



*Dr.*  
Head  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

# SUSTAINABLE DEVELOPMENT KERALA MODEL IN A FEMINIST VIEW

Project Dissertation

Submitted to



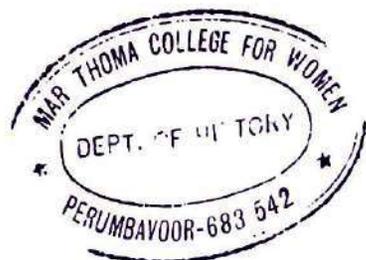
The Mahatma Gandhi University in partial fulfilment of the requirements for the award of the degree of

**BACHELOR OF ARTS**  
**HISTORY, ARCHAEOLOGY AND MUSEOLOGY**  
**2019-2022**

**AISWARYA MOHANAN**  
(190021017734)

Under the guidance of  
**Dr. BIBIN KURIAKOSE**

**DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY**  
**MAR THOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**



*Valued  
MS  
16/05/2023*

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR



## CERTIFICATE

This is to certify that this project dissertation entitled "sustainable development Kerala model in a feminist view "is a record of original work done by Ms. Aiswarya mohanan ( 190021017734) in partial fulfilment of the requirement for the award of degree of Bachelor of Arts in History, Archaeology and Museology to the Mahatma Gandhi University , Kottayam under the guidance of Dr. BIBIN KURIAKOSE Department of History, Archaeology and Museology . It is to certifies that this project report or any part of it has not been submitted elsewhere for any other degree.

Signature:

Guide :Dr. BIBIN KURIAKOSE

Department History Archaeology and Museology

Mar Thoma College for Women Perumbavoor

Signature :

HOD : BIBIN KURIAKOSE

Department of History Archaeology and Muselogy

Mar Thoma College for women Perumbavoor

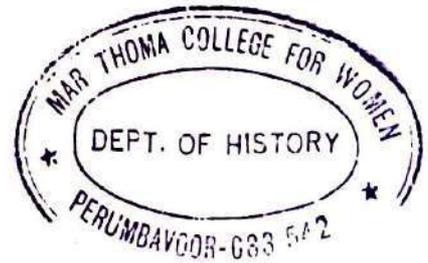
External Examiner

  
Head

Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

Date : 16/05/2022

Place: Perumbavoor



# THIRTEEN ARCH BRIDGE IN AYRANKAVU

Project Submitted to the  
Mahatma Gandhi University  
For Award of the degree in  
Bachelor of Arts in History, Archaeology and Museology  
(Credit and Semester System)



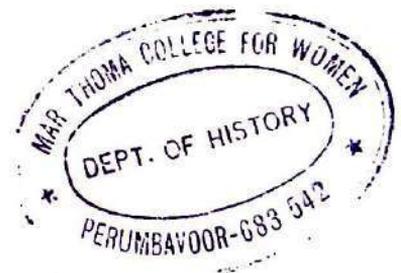
By

ANASWARA B.S

Reg. No: 190021017737

Guiding Teacher

Dr. Bibin Kuriakose



DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY

MAR THOMA COLLEGE FOR WOMEN

PERUMBAVOOR, KERALA – 683542

MAY 2022

Valued  
Pr. W  
16/05/2022

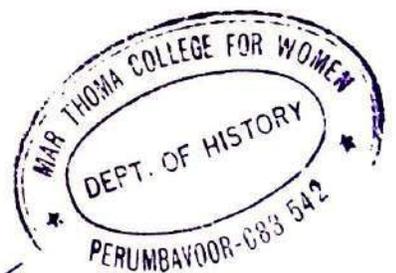
## CERTIFICATE

This is to certify the work entitled "Thirteen Arch Bridge" by Anaswara B.S in partial fulfilment of the requirement for the award of B.A Degree in History, Archaeology and Museology (Credit and semester system) in Mahatma Gandhi university, is a bonfire record of the work done by her under my supervision and guidance and no part of this work has been submitted elsewhere for any degree.

Dr. Bibin Kuriakose  
Head of the Department of  
History, Archaeology and Museology  
Mar Thoma College for Women  
Perumbavoor



**Head**  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala



# ARCHAEOLOGY OF THE KADUTHURUTHY CHURCH AND THE KNANAYA TRADITION

Project submitted to the Mahatma Gandhi University  
For Award of the Degree in  
Bachelor of Arts in History, Archaeology and Museology  
(Credit and Semester System)



By

SETHULAKSHMI C  
Reg.No.190021017756

Guiding Teacher  
Dr. Vinod V.

DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY  
MARTHOMA COLLEGE FOR WOMEN  
PERUMBAVOOR, KERALA-683542  
MAY 2022

## CERTIFICATE

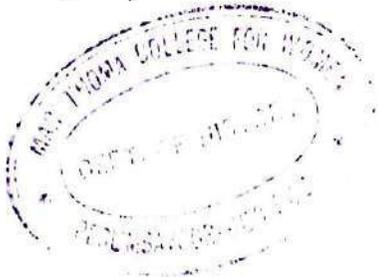
This is to certify that the work entitled "**Archaeology of the Kaduthuruthy Church and the Knanaya Tradition.**" by "Sethulakshmi C" in partial fulfilment of the requirement for the award of B.A Degree in History, Archaeology and Museology (Credit and Semester System) in Mahatma Gandhi University, is a bonafide record of the work done by her under my supervision and guidance and no part of this work has been submitted elsewhere for any degree.



Dr. Vinod V  
Assistant Professor  
Department of History,  
Archaeology and Museology  
MarThoma College for Women  
Perumbavoor, kerala-683542

Place: Perumbavoor

Date: 17/05/2022.



DISSERTATION

*Submitted to the Mahatma Gandhi University  
in partial fulfillment of the requirements for the award of Degree of  
Bachelor of Arts in History and archaeology with museology*



Valued  
P.H.S  
16/07/22

By;

ARYA R [Reg no;190021017739]

ATHIRA SANAL [Reg no;190021017742]

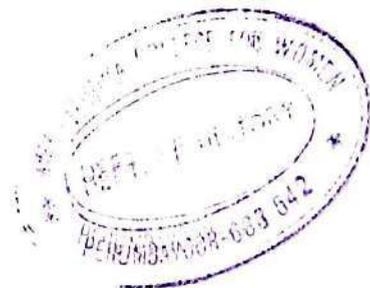
JIYA JOY [Reg no;190021017750]

DEPARTMENT OF HISTORY AND ARCHAEOLOGY WITH MUSEOLOGY

&

RESEARCH CENTRE

MARTHOMA COLLEGE FOR WOMEN; PERUMBAVOOR



## DECLARATION

We, Ms. Arya R, Ms. Athira Sanal , Ms. Jiya Joy, Department of History and Archaeology with Museology ,marthoma college for women; perumbavoor do hereby declare that the dissertation "Slavery in India with special reference to Kerala" is a bonafide record of work carried out by us and that no part of it has been presented before for any other degree ,diploma or title .

ARYA R  
ATHIRA SANAL  
JIYA JOY

(Reg.No.190021017739)  
(Reg.No.190021017742)  
(Reg.No.190021017750)

III B A History  
Department of History AND Archaeology with Museology  
MARTHOMA COLLEGE FOR WOMEN PERUMBAVOOR

PERUMBAVOOR ;

DATE ;

TO;

Head of the Department

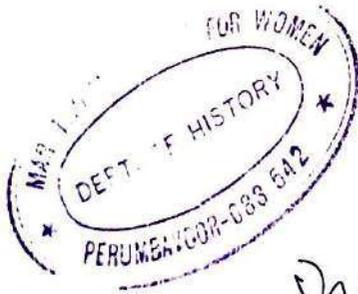
Dr;Bibin kuriakose

Head of the department of  
History and Achaeology

with museology

marthoma college for women ;

perumbavoor



Head  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

# NILAMBUR FOREST AND THE BRITISH TECHNO- ECOLOGICAL IMPERIALISM IN KERALA

Project submitted to the  
Mahatma Gandhi University  
For Award of the Degree in  
Bachelor of Arts in History, Archaeology and Museology  
(Credit and Semester System)



By

SNEHA JOSE

Reg. No- 190021017766

Guiding Teacher

Dr Bibin Kuriakose



DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY

MAR THOMA COLLEGE FOR WOMEN

PERUMBAVOOR, KERALA – 683542

APRIL 2022

## CERTIFICATE

This is to certify that the work entitled "**NILAMBUR FOREST AND THE BRITISH TECHENO - ECOLOGICAL IMPERIALISM IN KERALA**" by "SNEHA JOSE" in partial fulfillment of the requirement for the award of B.A Degree in History, Archaeology and Museology (Credit and Semester System) in Mahatma Gandhi University, is a bonfire record of the work done by her under my supervision and guidance and no part of this work has been submitted elsewhere for any degree.

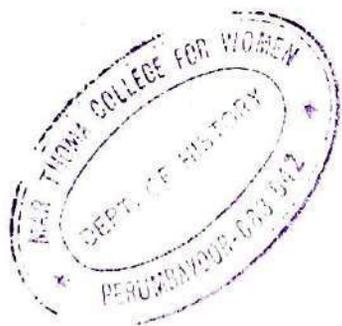
Dr Bibin Kuriakose

Head of the Department of

History, Archaeology and Museology

Mar Thoma College for Women

Perumbavoor



A handwritten signature in black ink, appearing to be "Bibin Kuriakose".

Head  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

# SOCIAL HISTORY OF AREEKODE

Project Submitted to the  
Mahatma Gandhi University  
for Award of the Degree in Bachelor of Arts in History, Archaeology Museology  
(Credit and Semester System)

*Valued  
P.K.S.  
16/02/22*



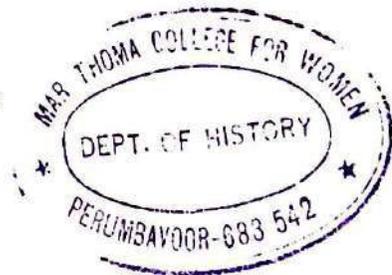
By

PANCHAMI KRISHNA. A

Reg. No. 190021017753

Guiding Teacher

Dr. Bibin Kuriakose



DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY

MAR THOMA COLLEGE FOR WOMEN

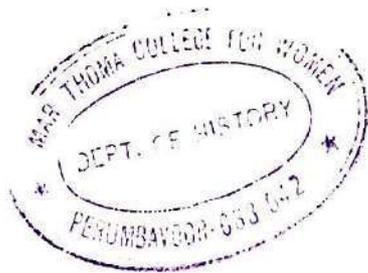
PERUMBAVOOR, KERALA - 683542

# CERTIFICATE

This is to certify that the work entitled " **Social history of Areekode**" by "Panchami Krishna.A" in partial fulfilment of the requirement for the award of B.A Degree in History, Archaeology and Museology (Credit and semester system ) in Mahatma Gandhi university, is a bonafide record of the work done by her under my supervision and guidance and no part of this work has been submitted elsewhere for any degree.

Dr.Bibin kuriakose

Head of the Department of  
History and Archeaology and Museology  
Marthoma college for women  
perumbavoor



  
Head  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 042, Kerala

# THE HISTORY OF NERYAMANGALAM BRIDGE

Project Dissertation

Submitted to



The Mahatma Gandhi University in partial fulfilment of the requirements for the award of the degree of

**BACHELOR OF ARTS**

**HISTORY, ARCHAEOLOGY AND MUSEOLOGY**

2019-2022

SARIKA SASI (190021017755)

SARANYA A.S(190021017765)

ARYANANDA SUPRAN(190021017740)

ASWATHY RAJU(190021017741)

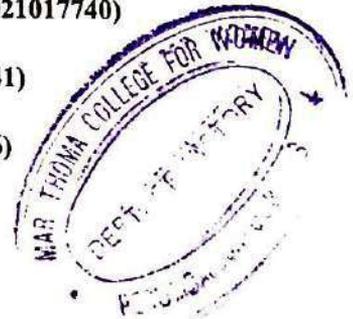
ANAGHA BIJU(190021017736)

Under the guidance of

**GISMON THOMAS**

**DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY**

**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**



*Valued  
MS  
16/10/2022*



**MAR THOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR, KERALA**

**സർട്ടിഫിക്കറ്റ്**

നേര്യമംഗലം പാലത്തിന്റെ ചരിത്രം എന്ന തലക്കെട്ടിലുള്ള ഈ പ്രൊജക്ട്, ബിരുദ പഠനത്തിന്റെ ഭാഗമായ പൂർത്തീകരണത്തിന് വേണ്ടി ശാരിക ശശി (Reg No:190021017755), ശരണ്യ എ. എസ് (Reg no: 190021017765), ആര്യനന്ദ സുപ്രൻ (Reg no: 190021017740), അശ്വതി രാജു (Reg no: 190021017741), അനഘ ബിജു (Reg no:190021017736) നടത്തിയ മൂലിക പ്രവർത്തനത്തിന്റെ രേഖയാണെന്ന് സാക്ഷ്യപ്പെടുത്തുന്നതിനാണ് ഇത്. ചരിത്ര പുരാവസ്തു വിഭാഗം അധ്യാപകനായ ജിസ്മോൻ തോമസിന്റെ നേതൃത്വത്തിൽ തയ്യാറാക്കിയ ഈ പ്രൊജക്ട് മറ്റുവിടെയും മറ്റു ബിരുദ പഠനകളുടെ ഭാഗമായി സമർപ്പിച്ചിട്ടില്ലായെന്നു സാക്ഷ്യപ്പെടുത്തുന്നു.

**Signature :**

**Guide : GISMON THOMAS**

**Department of History and Archaeology**  
**Mar Thoma College for Women**  
**Perumbavoor.**

**Signature :**

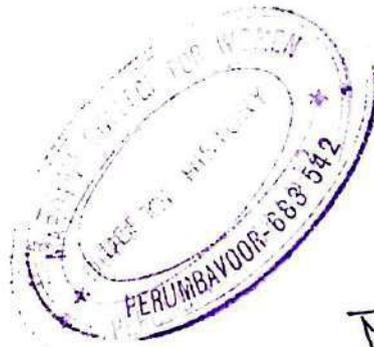
**HOD : Dr. BIBIN KURIAKOSE**

**Department of History and Archaeology**  
**Mar Thoma College for Women**  
**Perumbavoor.**

**External Examiner:**

**Date: 17/05/2022**

**Place:**



**Head**  
**Department of History**  
**Mar Thoma College for Women**  
**Perumbavoor - 683 542, Kerala**

# HISTORICAL BACKGROUND OF PALIAM PALACE

AND

# PALIAM NALUKETTU

DISSERTATION SUBMITTED TO THE MAHATMA GANDHI UNIVERSITY,  
KOTTAYAM, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARDS OF  
BACHELOR DEGREE IN HISTORY



BY

**SALIHA K.S**

Under supervision and guidance of

**GISMON THOMAS**

LECTURER IN HISTORY

Dept. of History and Archaeology



*Unbind  
M.C.  
16/03/22*

**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**  
(Affiliated to Mahatma Gandhi University, Kottayam)

May 2022

Department of History and Archacology

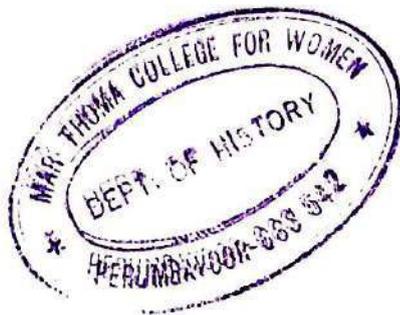
Marthoma College for Women

Perumbavoor ,Kerala-683 542

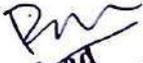
**CERTIFICATE**

This is to that the dissertation titled **Historical Importance of Paliam Palace and Paliam Nalukettu** is bonafide record of the project work done by **Saliha K S** under my supervision for the partial fulfillment of the award of Bachelor degree in History of the Mahatma Gandhi University , Kottayam.

Lecturer in History  
Perumbavoor



  
**GISMON THOMAS**

  
Head  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

**HISTORICAL BACKGROUND OF PALIAM PALACE  
AND  
PALIAM NALUKETTU**

DISSERTATION SUBMITTED TO THE MAHATMA GANDHI UNIVERSITY,  
KOTTAYAM, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARDS OF  
BACHELOR DEGREE IN HISTORY



BY

**FASLA T.A**

Under supervision and guidance of

**GISMON THOMAS**

LECTURER IN HISTORY

Dept. of History and Archaeology



**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**

**(Affiliated to Mahatma Gandhi University, Kottayam)**

**May 2022**

*Checked  
File  
16/03/2022*

Department of History and Archaeology

Marthoma College for Women

Perumbavoor ,Kerala-683 542

**CERTIFICATE**

This is to that the dissertation titled **Historical Importance of Paliam Palace and Paliam Nalukettu** is bonafide record of the project work done by **FASLA T.A** under my supervision for the partial fulfillment of the award of Bachelor degree in History of the Mahatma Gandhi University , Kottayam.



Lecturer in History

Perumbavoor

A handwritten signature in black ink, appearing to read "Gison Thomas".

**GISMON THOMAS**

A handwritten signature in black ink, appearing to be a stylized name.

**Head**

**Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542, Kerala**

# HISTORICAL BACKGROUND OF PALIAM PALACE AND PALIAM NALUKETTU

DISSERTATION SUBMITTED TO THE MAHATMA GANDHI UNIVERSITY,  
KOTTAYAM, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARDS OF  
BACHELOR DEGREE IN HISTORY



BY

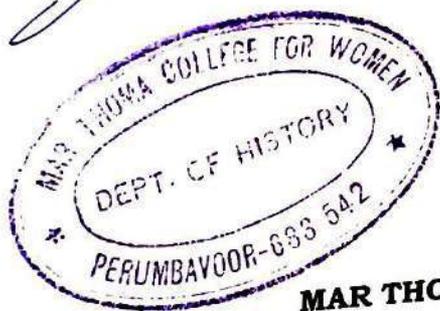
**JASMIN C.M**

Under supervision and guidance of

**GISMON THOMAS**

LECTURER IN HISTORY

Dept. of History and Archaeology



**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**  
(Affiliated to Mahatma Gandhi University, Kottayam)

May 2022

*Valued  
file  
16/03/22*

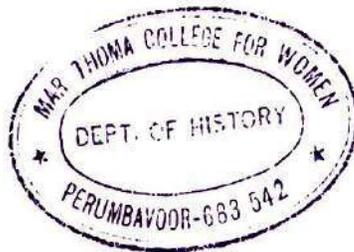
Department of History and Archaeology

Marthoma College for Women

Perumbavoor ,Kerala-683 542

**CERTIFICATE**

This is to that the dissertation titled **Historical Importance of Paliam Palace and Paliam Nalukettu** is bonafide record of the project work done by **JASMIN C.M** under my supervision for the partial fulfillment of the award of Bachelor degree in History of the Mahatma Gandhi University , Kottayam.



Lecturer in History

Perumbavoor

  
Head  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

  
**GISMON THOMAS**

# THE HISTORY OF NERYAMANGALAM BRIDGE

Project Dissertation

Submitted to



The Mahatma Gandhi University in partial fulfilment of the requirements for the award of the degree of

**BACHELOR OF ARTS**

**HISTORY, ARCHAEOLOGY AND MUSEOLOGY**

2019-2022

SARIKA SASI (190021017755)

SARANYA A.S.(190021017765)

ARYANANDA SUPRAN(190021017740)

ASWATHY RAJU(190021017741)

ANAGHA BIJU(190021017736)

Under the guidance of

**GISMON THOMAS**

**DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY**

**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**





# MAR THOMA COLLEGE FOR WOMEN

PERUMBAVOOR, KERALA

സർട്ടിഫിക്കറ്റ്

നേര്യമംഗലം പാലത്തിന്റെ ചരിത്രം എന്ന തലക്കെട്ടിലുള്ള ഈ പ്രൊജക്ട്, ബിരുദ പഠനത്തിന്റെ ഭാഗമായ പൂർത്തിയാക്കുന്നതിന് വേണ്ടി ശാരിക ശശി (Reg No:190021017755), ശരണ്യ എ. എസ് (Reg no: 190021017765), ആര്യനന്ദ സുപ്രൻ (Reg no: 190021017740), അശ്വതി രാജു (Reg no: 190021017741), അനഘ ബിജു (Reg no:190021017736) നടത്തിയ മൂലിക പ്രവർത്തനത്തിന്റെ രേഖയാണെന്ന് സാക്ഷ്യപ്പെടുത്തുന്നതിനാണ് ഇത്. ചരിത്ര പുരാവസ്തു വിഭാഗം അധ്യാപകനായ ജിസ്മോൻ തോമസിന്റെ നേതൃത്വത്തിൽ തയ്യാറാക്കിയ ഈ പ്രൊജക്ട് മറ്റെവിടെയും മറ്റു ബിരുദ പഠനങ്ങളുടെ ഭാഗമായി സമർപ്പിച്ചിട്ടില്ലായെന്നു സാക്ഷ്യപ്പെടുത്തുന്നു.

Signature :

Guide : GISMON THOMAS

Department of History and Archaeology

Mar Thoma College for Women

Perumbavoor.

Signature :

HOD : Dr. BIBIN KURIAKOSE

Department of History and Archaeology

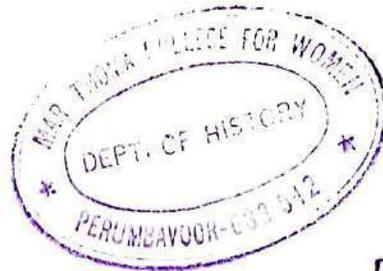
Mar Thoma College for Women

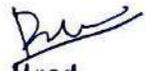
Perumbavoor.

External Examiner:

Date: 17/05/2022

Place:



  
Head

Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

**HISTORICAL BACKGROUND OF PALIAM PALACE  
AND  
PALIAM NALUKETTU**

DISSERTATION SUBMITTED TO THE MAHATMA GANDHI UNIVERSITY,  
KOTTAYAM, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARDS OF  
BACHELOR DEGREE IN HISTORY



BY

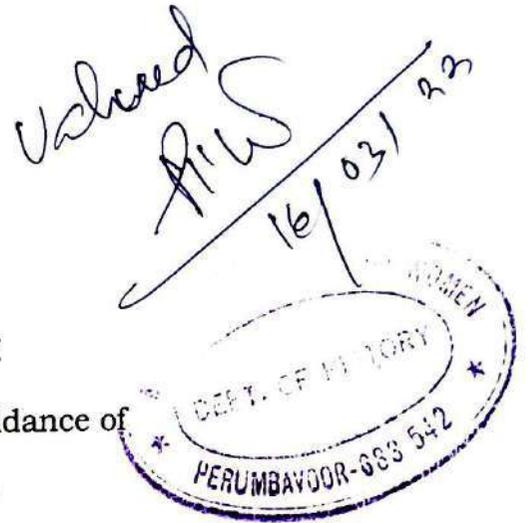
**FATHIMA SALEEM**

Under supervision and guidance of

**GISMON THOMAS**

LECTURER IN HISTORY

Dept. of History and Archaeology



**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**

**(Affiliated to Mahatma Gandhi University, Kottayam)**

**May 2022**

Department of History and Archaeology

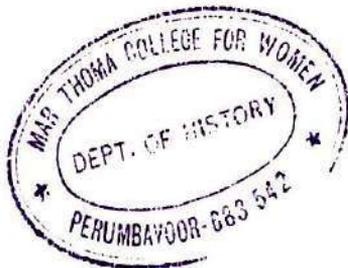
Marthoma College for Women

Perumbavoor , Kerala-683 542

**CERTIFICATE**

This is to that the dissertation titled **Historical Importance of Paliam Palace and Paliam Nalukettu** is bonafide record of the project work done by **FATHIMA SALEEM** under my supervision for the partial fulfillment of the award of Bachelor degree in History of the Mahatma Gandhi University , Kottayam.

Lecturer in History  
Perumbavoor



  
**GISMON THOMAS**

  
Head  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

# SUSTAINABLE DEVELOPMENT KERALA MODEL IN A FEMINIST VIEW

Project Dissertation

Submitted to



The Mahatma Gandhi University in partial fulfilment of the requirements for the award of the degree of

**BACHELOR OF ARTS**  
**HISTORY, ARCHAEOLOGY AND MUSEOLOGY**  
**2019-2022**

**AISWARYA MOHANAN**  
(190021017734)

Under the guidance of  
**Dr. BIBIN KURIAKOSE**

**DEPARTMENT OF HISTORY, ARCHAEOLOGY AND MUSEOLOGY**  
**MAR THOMA COLLEGE FOR WOMEN**  
**PERUMBAVOOR**

*Valued  
PWS  
16/3/22*



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR



## CERTIFICATE

This is to certify that this project dissertation entitled "sustainable development Kerala model in a feminist view "is a record of original work done by **Ms. Aiswarya mohanan ( 190021017734)** in partial fulfilment of the requirement for the award of degree of Bachelor of Arts in History, Archaeology and Museology to the Mahatma Gandhi University , Kottayam under the guidance of **Dr. BIBIN KURIAKOSE** Department of History, Archaeology and Museology . It is to certifies that this project report or any part of it has not been submitted elsewhere for any other degree.

Signature:

Guide :**Dr. BIBIN KURIAKOSE**

Department History Archaeology and Museology  
Mar Thoma College for Women Perumbavoor

Signature :

HOD : **BIBIN KURIAKOSE**

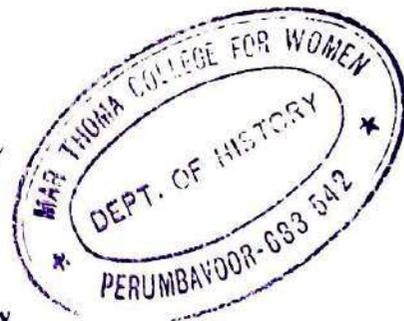
Department of History Archaeology and Muselogy  
Mar Thoma College for women Perumbavoor

External Examiner

Date : 16/05/2022

Place: Perumbavoor

**Head**  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala



Topic

# HISTORICAL SIGNIFICANCE OF COCHIN PORT

Project submitted to Mahatma Gandhi University, Kottayam for award  
of Degree in Bachelor of Arts in History, Archaeology and Museology

(Credit and Semester System)

By

KRISHNA PRIYA K S

FATHIMA M M

FASEELA K A

MINI GEORGE

SHARAFIYA C A



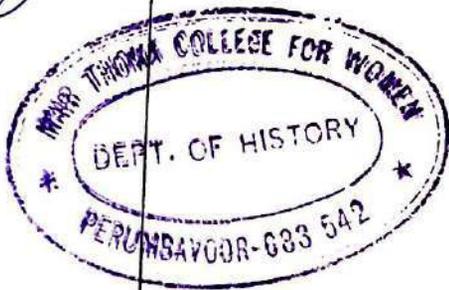
Guiding Teacher

**Dr. Bibin Kuriakose**

Department of History, Archaeology and Museology

**MARTHOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR, KERALA**



*Checked  
16/08/2022*

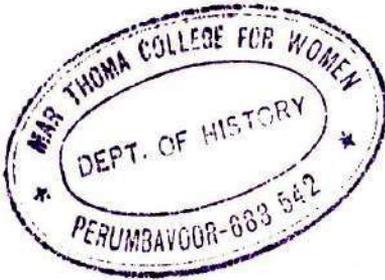
## CERTIFICATE

This is to certify that the work entitled "Historical Significance of Cochin Port" being submitted by KRISHNA PRIYA K S, FATHIMA M M, FASEELA K A, MINI GEORGE, and SHARAFIYA C A is practical fulfilment of the requirement for the award of Bachelor of Arts in History, Archaeology and Museology (Credit and Semester System) in MAHATMA GANDHI UNIVERSIT, is a bonafide record of the work done by them under my supervision and guidance and no part of this work has been submitted elsewhere of any degree.

PLACE : PERUMBAVOOR

Dr. BIBIN KURIAKOSE  
Head of the Department of History  
Marthoma College for Women

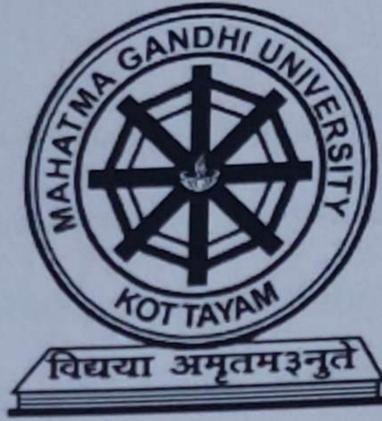
DATE : 16/5/2022



  
Head  
Department of History  
Mar Thoma College for Women  
Perumbavoor - 683 542., Kerala

**Reading childhood Trauma in *Mystic River***

A project submitted to Mahatma Gandhi University in partial fulfillment of the Degree of Bachelor of Arts in English Language and Literature (Model II Administrative Assistant)



Submitted by

Aaliya P Moideen

Reg no 190021011069

Under the supervision of

Dr. Minu Susan Koshy

Assistant Professor

Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**(2019-2022)**

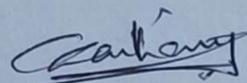
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

CERTIFICATE

This is to certify that the project titled "*Reading childhood Trauma in Mystic River*" is a bona file record of research work done by Ms. Aaliya P Moideen (Reg No. 190021011069) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts in English Language and Literature (Model II Administrative Assistant) to Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any other similar titles of any other University or Board

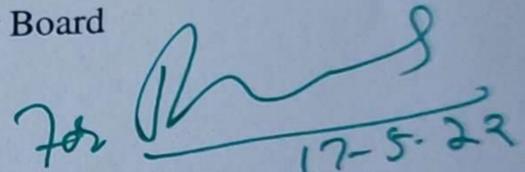
Dr. Minu Susan Koshy

Project supervisor



Ms. Chaithanya Elsa Achankunju.

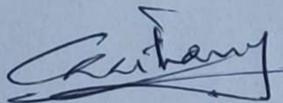
Head of the Department.



17-5-22

Dr. Sujo Mary Varghese

Principal



External Examiner

## DECLARATION

I, Aaliya P Moideen, hereby declare that the project titled "*Reading childhood Trauma in Mystic River*" is a bona fide record of research work done by me under the guidance of Dr. Minu Susan Koshy, Assistant Professor, Department of English, Mar Thoma College for Women, Perumbavoor, and that this work has not formed the basis of any academic qualifications of any other University of Board.

Place: Perumbavoor

Date: 16/05/2022



Ms. Aaliya P Moideen

Reg No: 190021011069

**Reading Masculinity in *Ayyappanum Koshiyum* and *Ishq***

A project submitted to Mahatma Gandhi University in partial fulfillment of the Degree of  
Bachelor of Arts in English



Submitted By

Afrin Shahul

Reg No:1900221011070

Under the Supervision of

Ms. Chaithanya Elsa Achankunju

Head of the Department

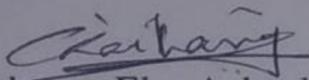
Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR 2019-2022**

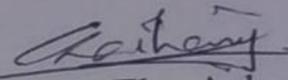
MARTHOMA COLLEGE FOR WOMEN, PERUMBAVOOR

CERTIFICATE

This is to certify that the project entitled *Reading Masculinity in Ayyappanum Koshiyum and Ishq* is a record of research work done by Ms. Afrin Shahul (RegNo:190021011070) in Partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts of the Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any similar title of any other University or Board.

  
Ms. Chaithanya Elsa Achankunju.

Project Supervisor.

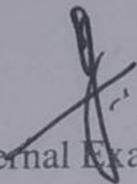
  
Ms. Chaithanya Elsa Achankunju

Head of the Department

  
17-5-22

Dr. Sujo Mary Varghese

Principal

  
External Examiner

## DECLARATION

I, Afrin Shahul, hereby declare that the project titled <sup>Reading</sup> **Masculinity in movies**  
*Ayyappanum Koshiyum and Ishq* is a record of research work done by me under the  
guidance of Ms. Chaithanya Elsa Achankunju, Head of the Department, Department of  
English, Mar Thoma College for Women, Perumbavoor and this work has not formed the  
basis of any academic qualifications, of any other University or Board.

Place : Perumbavoor.

Date: 18/05/2022



Ms. Afrin Shahul

Reg No: 190021011070

*Urban Expansion and Marginalisation in Kammatipuadam*

A project submitted to Mahatma Gandhi University in partial fulfillment of the Degree of  
Bachelor of Arts in English Language and Literature (Model II Administrative Assistant)



Submitted By

ALFIYA P.A

Reg No:190021011087

Under the Supervision of

Ms. Chaithanya Elsa Achankunju

Head of the Department

Department of English

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

(2019-2022)

2023.02.09 19:32

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

CERTIFICATE

This is to certify that the project entitled Urban Expansion and Marginalisation in *Kammatipaadam* is a bona fide work done by ALFIYA P. A (Reg. No.:190021011087) in partial fulfillment of the requirement for the award of the Degree of Bachelor of Arts of the Mahatma Gandhi University, Kottayam. This project has not been previously used for the award of any similar title of any other University or Board.



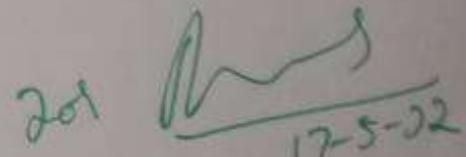
Ms. Chaithanya Elsa Achankunju

Project Supervisor



Ms. Chaithanya Elsa

Head of the Department



Dr. Sujo Mary Varghese

Principal

## DECLARATION

I, ALFIYA P.A., hereby declare that the project titled Urban Expansion and Marginalisation in *Kammutipuudam* is a bona fide record of work done by me under the guidance of Ms. Chaithanya Elsa Achankunju, Head of the Department, Department of English, Mar Thoma College for Women, Perumbavoor, and this work has not formed the basis of any academic qualifications, of any other University or Board.

Place : Perumbavoor

Date : 16/05/2022

Alfiya

Ms. ALFIYA P.A.

Reg. No: 190021011087

**Reading Transhumanism in *Lucy***

A project submitted to Mahatma Gandhi University in partial fulfilment of the Degree  
of Bachelor of Arts in English Language and Literature (Model II Administrative  
Assistant)



Submitted by

Ms. Amal Saleem

Reg No: 190021011072

Under the supervision of

Ms. Roshin T. Roy

Assistant Professor

Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

(2019-2022)

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**CERTIFICATE**

This is to certify that the project titled "Reading Transhumanism in *Lucy*" is a bona fide record of research work done by Ms. Amal Saleem (RegNo:190021011072) in partial fulfilment of the requirements for the award of the Degree of Bachelor of Arts in English Language and Literature (Model II Administrative Assistant) to Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any other similar titles of any other University or Board.

Dr. Sujo Mary Varghese  
17.5.22.

Dr. Sujo Mary Varghese

Principal

Ms. Chaithanya Elsa Achankunju

Ms. Chaithanya Elsa Achankunju

Head of the Department

Ms. Roshin T. Roy

Ms. Roshin T. Roy

Project Supervisor

External Examiner

## DECLARATION

I, Amal Saleem, hereby declare that the project titled "Reading Transhumanism in *Lucy*" is a record of research work done by me under the guidance of Ms. Roshin T. Roy, Assistant Professor, Department of English, Mar Thoma College for Women, Perumbavoor and that this work has not formed the basis of any academic qualifications of any other University or Board.

Place: Perumbavoor

Date: 16 May, 2022



Ms. Amal Saleem

Reg.No:190021011072

**Pride versus Predicament: A Nietzschean Analysis of the Novel *Normal People* by Sally Rooney**

A project submitted to Mahatma Gandhi University in partial fulfillment of the Degree of Bachelor of Arts  
in English Language and Literature (Model II Administrative Assistant)



Submitted By

Athira Surendran

Reg No:190021011077

Under the Supervision of

Ms. Sangeetha Rachel Koruth

Assistant Professor

Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**(2019-2022)**

**MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR**

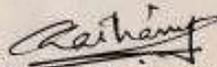
**CERTIFICATE**

This is to certify that the project titled "Pride versus Predicament: A Nietzschean Analysis of the Novel *Normal People* by Sally Rooney" is a bona fide work done by Ms. Athira Surendran (RegNo:190021011077) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts, to Mahatma Gandhi University, Kottayam. This project has not been previously used for the award of any other similar titles of any other University or Board.



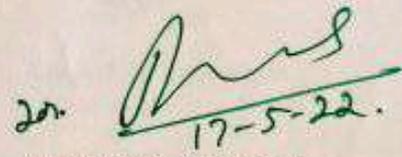
Ms. Sangeetha Koruth

Project supervisor



Ms. Chaithanya Achankunju

Head of the Department



Dr. Sujo Mary Varghese

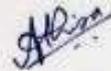
Principal



External Examiner

## DECLARATION

I, Athira Surendran , hereby declare that the project titled "Pride versus Predicament: A Nietzschean Analysis of the Novel *Normal People* By Sally Rooney" is a bona fide record of work done by me under the guidance of Ms. Sangeetha Rachel Koruth, Assistant Professor, Department of English, Mar Thoma college for Women, Perumbavoor and this work has not formed the basis of any academic qualifications of any other University or Board.



Place: Perumbavoor

Ms. Athira Surendran

Date: 16-05-2022

Reg. No: 190021011077

**“Your Doll is My Child-” A Psychoanalytic Study of the Novel *An American***

***Marriage by Tayari Jones***

A project submitted to Mahatma Gandhi University in partial fulfillment of the  
Degree of Bachelor of Arts in English Language and Literature (Model II  
Administrative Assistant)



Submitted By

Binsa Jaffer

Reg No:190021011089

Under the Supervision of

Ms. Sangeetha Rachel Koruth

Assistant Professor

Department of English

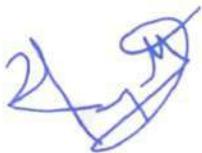
**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**(2019 – 2022)**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

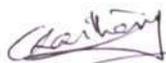
**CERTIFICATE**

This is to certify that the project titled "Your Doll is My Child - A Psychoanalytic Study of the Novel *An American Marriage* by Tayari Jones" is a bona fide work done by Ms. Binsa Jaffer (RegNo:190021011089) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts, to Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any other similar titles of any other University or Board.



Ms. Sangeetha Koruth

Project Supervisor.



Ms. Chaithanya Achankunju

Head of the Department



Dr. Sujo Mary Varghese

Principal



External Examiner

## DECLARATION

I, Binsa Jaffer , hereby declare that the project titled “Your Doll is My Child - A Psychoanalytic Study of the Novel *An American Marriage* by Tayari Jones” is a bona fide record of work done by me under the guidance of Ms. Sangeetha Rachel Koruth, Assistant Professor, Department of English, Mar Thoma college for Women, Perumbavoor and that this work has not formed the basis of any academic qualifications of any other University or Board.

Place : Perumbavoor.

Date : 16/05/2022



Ms. Binsa Jaffer

Reg. No: 190021011089

## **Reading Food Culture in *Madhuram***

A project submitted to Mahatma Gandhi University in partial fulfilment of the Degree of Bachelor of Arts in English Language and Literature (Model II Administrative Assistant)



Submitted By

Ms. Fathima Salha

Reg No:190021011079

Under the Supervision of

Ms. Roshin T. Roy

Assistant Professor

Department of English

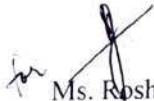
**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**(2019-2022)**

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

CERTIFICATE

This is to certify that the project titled “**Reading Food Culture in Madhura**” is a bona fide record of research work done by Ms. Fathima Salha (RegNo:190021011079) in partial fulfilment of the requirements for the award of the Degree of Bachelor of Arts in English Language and Literature (Model II Administrative Assistant) to Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any other similar titles of any other University or Board.



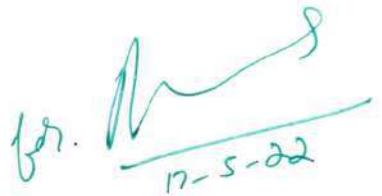
Ms. Roshin T. Roy

Project Supervisor



Ms. Chaithanya Elsa Achankunju

Head of the Department

  
17-5-22

Dr. Sujo Mary Varghese

Principal



External Examiner

## DECLARATION

I, Fathima Salha, hereby declare that the project titled “**Reading Food Culture in *Madhuram***” is a record of research work done by me under the guidance of Ms. Roshin T. Roy, Assistant Professor, Department of English, Mar Thoma college for Women, Perumbavoor, and that this work has not formed the basis of any academic qualifications of any other University or Board.

Place: Perumbavoor

Date: 16-05-2022



Ms. Fathima Salha

Reg. No: 190021011079

**Racism in the movie *The Last Blackman In San Francisco***

A project submitted to Mahatma Gandhi University in partial fulfilment of the Degree of Bachelor of Arts in English Language and Literature (Model II Administrative Assistant)



Submitted By

FathimaNoushad V N

Reg No: 190021011078

Under the Supervision of

Dr. Minu Susan Koshy

Assistant Professor

Department Of English

**MAR THOMA COLLEGE FOR WOMEN , PERUMBAVOOR**

**(2019-2022)**

CERTIFICATE

This is to certify that the project titled Racism in The Last Black In San Francisco record of research done by Ms. FathimaNoushad v n (Reg no: 190021011078) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts, to Mahatma Gandhi University, Kottayam . The project has not been previously used for the award of any similar titles of any other University or Board.

Dr. Minu Susan Koshy

Project Supervisor

  
Ms. Chaithanya Elsa Achankunju

Head Of Department

  
External Examiner

  
17-5-22

Dr. Sujo Mary Varghese

Principal

## DECLARATION

I, FathimaNoushad V N, hereby declare that the project titled Racism in movie The Last Black In San Francisco record of research work done by me under the guidance of Dr. Minu Susan Koshy, Assistant Professor, Department of English, Mar Thoma College for Women, Perumbavoor and that this work has not formed the basis of any academic qualification of any other University or Board.

Place: Perumbavoor

Fathima

Ms . FathimaNoushad v n

Reg no: 190021011078

**A Post-Truth Reading of Jeethu Joseph's *Drishyam*  
and *Drishyam 2: The Resumption***

*A project submitted to Mahatma Gandhi University  
in partial fulfillment of the Degree of  
Bachelor of Arts in English Language and Literature  
(Model II Administrative Assistant)*



*Submitted By*

**FIDHA AFRIN AS**

Reg. No: 190021011092

*Under the Supervision of*

**Ms CHAITHANYA ELSA ACHANKUNJU**

Assistant Professor

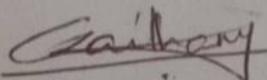
Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019-2022**

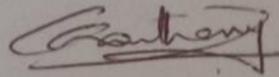
CERTIFICATE

This is to certify that the project titled "Reading Post-Truth on Jeethu Joseph's *Drishyam* and *Drishyam 2: The Resumption*" is a record of research work done by Ms. Fidha Afrin AS (Reg. No: 190021011092) in Partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts, to Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any other similar titles of any other University or Board.



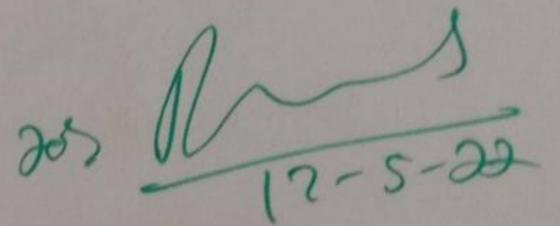
Ms. Chaithanya Elsa Achankunju

*Project Supervisor*



Ms. Chaithanya Elsa Achankunju

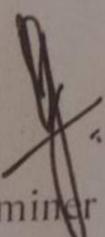
*Head of the Department*



20/12-5-22

Dr. Sujo Mary Varghese

*Principal*



Examiner

## DECLARATION

I, **Fidha Afrin AS**, hereby declare that the project titled "Reading Post-Truth on Jeethu Joseph's *Drishyam* and *Drishyam 2: The Resumption*" Movie Series is a record of research work done by me under the guidance of **Ms. Chaithanya Elsa Achankunju**, Head of the Department, Department of English, Mar Thoma College for Women, Perumbavoor and that this work has not formed the basis of any academic qualifications of any other University or Board.

Place : Perumbavoor

Date: 16 May 2022



**Ms. Fidha Afrin AS**

Reg. No: 19002101092

**Exploring 'Barrenness as Disability' in *One Part Woman* and *Trial by Silence***

A project submitted to Mahatma Gandhi University in partial fulfillment of the  
Degree of Bachelor of Arts in English



Submitted By

Gopika Nandanakumar  
Reg. No.: 190021011093

Under the Supervision of

Ms. Preethi Sara Joseph  
Assistant Professor  
Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR  
(2019-2022)**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

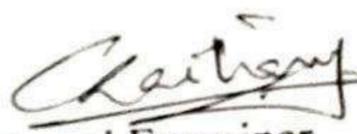
**CERTIFICATE**

This is to certify that the project entitled **Exploring 'Barrenness as Disability' in *One Part Woman and Trial by Silence*** is a bona fide work done by Gopika Nandanakumar (Reg. No. : 190021011093) in partial fulfillment of the requirement for the award of the Degree of Bachelor of Arts of the Mahatma Gandhi University, Kottayam. This project has not been previously used for the award of any similar title of any other University or Board.

  
Ms. Preethi Sara Joseph  
Project Supervisor

  
Ms. Chaithanya Elsa Achankunju  
Head of the Department

  
Dr. Sujo Mary Varghese  
Principal  
16/5/2022

  
External Examiner

## DECLARATION

I, Gopika Nandanakumar, hereby declare that the project titled **Exploring 'Barrenness as Disability' in *One Part Woman* and *Trial by Silence*** is a bona fide record of work done by me under the guidance of Ms. Preethi Sara Joseph, Assistant Professor, Department of English, Mar Thoma College for Women, Perumbavoor, and this work has not formed the basis of any academic qualifications, of any other University or Board.

Place: Perumbavoor

Date: 16-05-2022



Ms. Gopika Nandanakumar

Reg.No.190021011093

**Reading Body Shaming in Malayalam Movie *Thamaasha***

A project submitted to Mahatma Gandhi University in partial Fulfillment of the Degree  
of Bachelor of Arts in English



Submitted by

Rumaisa C. B.

Reg. No. 190021011083

Under the supervision of

Ms. Roshin T Roy

Assistant Professor

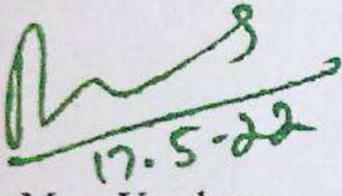
Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

(2019-2022)

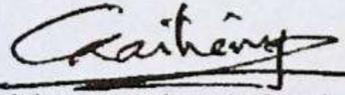
## CERTIFICATE

This is to certify that the project titled **Reading Body Shaming in Malayalam Movie Thamaasha** is a bona fide record of research work done by Ms. Rumaisa C. B. (Reg. No. 190021011083) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts of the Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any other similar titles of any other University or Board.

2021-17.5.22  


Dr. Sujo Mary Varghese

Principal



Ms. Chaithanya Elsa Achankunju

Head of the Department



Ms. Roshin T Roy

Project Supervisor



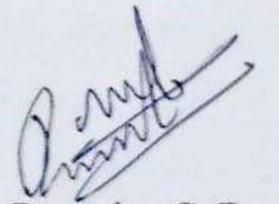
External Examiner

## DECLARATION

I, Rumaisa C. B., hereby declare that the project titled **Reading Body Shaming in Malayalam Movie *Thamaasha*** is a bona fide record of work done by me under the guidance of Ms. Roshin T Roy, Assistant Professor, Department of English, and Mar Thoma College for Women, Perumbavoor. I solemnly declare that this dissertation has not been previously submitted for the award of any academic qualifications, of any other University or Board.

Place: Perumbavoor

Date: 17|05|2022



Ms. Rumaisa C. B.

Reg. No.: 190021011083

**Obscure Representation of Dalits: Dismantling *Kala*.**

A project submitted to Mahatma Gandhi University in partial fulfillment of the Degree of  
Bachelor of Arts in English



Submitted By

Sharon Sara Thomas

Reg No: 190021011095

Under the Supervision of

Dr. Minu Susan Koshy

Assistant Professor

Department Of English

**Mar Thoma College for Women, Perumbavoor**

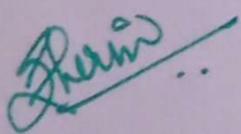
**2021-2022**

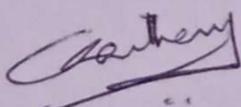
MAR THOMA COLLEGE FOR WOMEN, PERUMBAAVOOR

CERTIFICATE

This is to certify that the project titled *Obscure Representation of Dalits: Dismantling Kala* in record of research done by Ms. Sharon Sara Thomas (Reg no: 190021011095) in practical fulfillment

of the requirements for the award of the Degree of Bachelor of Arts, to Mahatma Gandhi University, Kottayam . The project has not been previously used for the award of any similar titles of any other University or Board.

  
Dr. Sujo Mary Varghese  
Principal

  
Ms. Chaithanya Elsa Achankunju  
Head of Department

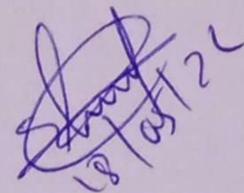
Dr. Minu Susan Koshy  
Project Supervisor

  
External Examiner

**DECLARATION**

I, Sharon Sara Thomas, hereby declare that the project titled "Obscure Representation of Dalits: Dismantling *Kala*" in record of research work done by me under the guidance of Dr. Minu Susan Koshy, Assistant Professor, Department of English, Mar Thoma College for Women, Perumbavoor and that this work has not formed the basis of any academic qualification of any other University or Board.

Place: Perumbavoor



Ms. Sharon Sara Thomas

Reg no: 190021011095

## Reading Psychological Trauma in Stand Up

A project submitted to Mahatma Gandhi University in partial Fulfillment of the  
Degree of Bachelor of Arts in English Language and Literature (Model II

Administrative Assistant)



Submitted by

Shifana Nasrin.

Reg no 190021011085

Under the supervision of

Ms. Roshin T Roy

Assistant Professor

Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

(2019-2022)

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**CERTIFICATE**

This is to certify that the project titled "Reading Psychological Trauma in Stand Up" is a bonafide record of research work done by Ms. Shifana Nazrin (Reg No. 190021011085) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts in English Language and Literature (Model II Administrative Assistant) to Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any other similar titles of any other University or Board.

  
Dr. Sujo Mary Varghese  
Principal

  
Ms. Chaithanya Elsa Achankunju  
Head of the Department

  
Ms. Roshin T. Roy  
Project Supervisor

  
Examiner

## DECLARATION

I, Shifana Nazrin, hereby declare that the project titled "Reading psychological Trauma in Stand Up" is a bona fide record of research work done by me under the guidance of Ms. Roshin T Roy, Assistant Professor, Department of English, Mar Thoma College for Women, Perumbavoor, and that this work has not formed the basis of any academic qualifications of any other University or Board.

Place: Perumbavoor

Date: 16-05-2022



Ms. Shifana Nazrin

Reg No: 190021011085

**Representation of Transgender Identity in *Njan Marykutty***

A project submitted to Mahatma Gandhi University in partial fulfillment of the Degree  
of Bachelor of Arts in English Language and Literature (Model II Administrative  
Assistant)



Submitted by

Vinaya Priya Venugopal

Reg No: 190021011096

Under the Supervision of

Ms. Roshin T Roy

Assistant Professor

Department of English

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**(2019-2022)**

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

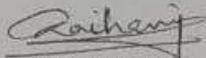
CERTIFICATE

This is to certify that the project titled "Representation of Transgender Identity in *Njan Marykutty*" is a bona fide record of research work done by Ms. Vinaya Priya Venugopal (RegNo:190021011096) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Arts in English Language and Literature (Model I Administrative Assistant), to Mahatma Gandhi University, Kottayam. The project has not been previously used for the award of any other similar titles of any other University or Board.



Ms. Roshin T. Roy

Project Supervisor



Ms. Chaithanya Elsa

Head of the Department

For   
17-5-22.

Dr. Sujo Mary Varghese

Principal



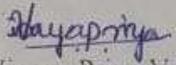
External Examiner

## DECLARATION

I, Vinaya Priya Venugopal, hereby declare that the project titled "Representation of Transgender Identity in *Njan Marykutty*" is a record of research work done by me under the guidance of Ms. Roshin T. Roy, Assistant Professor, Department of English, Mar Thoma College for Women, Perumbavoor and that this work has not formed the basis of any academic qualifications of any other University or Board.

Place : Perumbavoor

Date : 16/05/ 2022

  
Ms. Vinaya Priya Venugopal

Reg. No: 190021011096

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Geethu K R**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Praveena K P**, student of P.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Jaseela Irshad**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Aisha K S**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



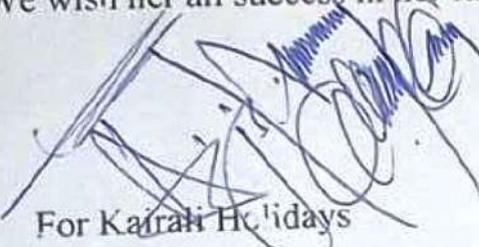
\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Anaga T M**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

  
For Kairali Holidays



\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Annmariya George**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Ashwini M V, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



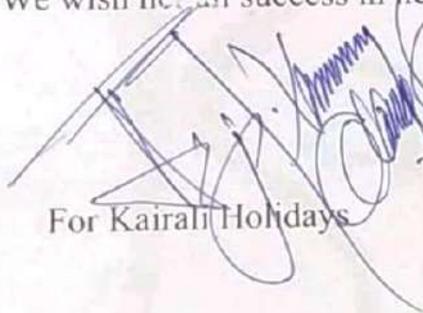
\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Nandini B**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

  
For Kairali Holidays



**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Jesmi A J** student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali-Holidays



**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Meenu P P**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Bhagyalakshmi Anil**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays

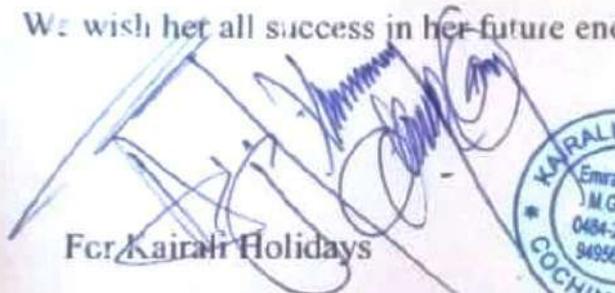


**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Aneena Antony**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

  
For Kairali Holidays



**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Anagha K S**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Afnitha C A**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Anjali C Murali**, student of B Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us we found her hard working, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Mary Maleesha M A**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Benna Molly Varghose**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Fathima Majeed**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Akhila Babu**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ms. Letta Jacob**, student of B.Voc Tourism and Hospitality Management 2020-2023 batch of Mar Thoma College for Women Perumbavoor has successfully completed her one month Internship Programme in our Organization from 01-11-2021 to 30-11-2021.

During the tenure with us, we found her hardworking, sincere and Honest. We have many appreciations regarding her work.

We wish her all success in her future endeavors.

For Kairali Holidays



\*AIR TICKET \* BUS BOOKING \* CAR RENTAL \* HOTEL BOOKING \* PASSPORT \* RAILWAY BOOKING \*  
TRAVEL INSURANCE \* VISA \* TOUR PACKAGE \* FOREIGN EXCHANGE \*

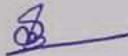
DEPARTMENT OF ZOOLOGY  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

CERTIFICATE

*This is to certify that the dissertation "AN INVESTIGATIVE STUDY ON MOLLUSCAN DIVERSITY OF CHERAI BEACH" is an authentic record of the project work done by miss, AMRITHA SINGH. K during the academic year 2020- 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.*



Mrs. REEMI SARA MATHAI



Mrs. SUNU N.V

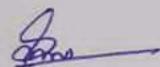
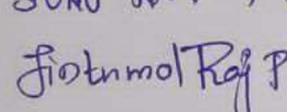
Head of the Department Supervising teacher

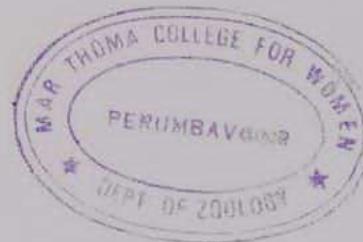
Department of Zoology Department of zoology

Mar Thoma College for Women Mar Thoma College for Women

Perumbavoor Perumbavoor

EXAMINERS

1. SUNU N.V , 
2.  John Mathai 



## DECLARATION

*I hereby declare that this dissertation entitled "INVESTIGATIVE STUDY ON MOLLUSCAN DIVERSITY OF CHERAI BEACH" submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology is a bonafide record of the project work, carried out by me.. under the supervision of Mrs. SUNU N.V, Lecturer, Department of Zoology. Mar Thoma college for Women, Perumbavoor, no part of this has been presented earlier for any diploma, or similar title of any other university or institution.*

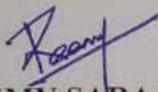
Place: PERUMBAVOORAMRITHA SINGH K

Date:

**DEPARTMENT OF ZOOLOGY**  
**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**CERTIFICATE**

*This is to certify that the dissertation “ DIVERSITY AND ENDEMISM OF BUTTERFLIES OF MANNAVAN SHOLA OF ANAMUDI SHOLA NATIONAL PARK IN THE WESTERN GHATS ” is an authentic record of the project work done by Miss. DEEPIKA Y during the academic year 2020 – 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.*



**Mrs. REEMY SARA MATHAI**

Assistant Professor

Head of the Department

Department of Zoology

Mar Thoma College for Women

Perumbavoor



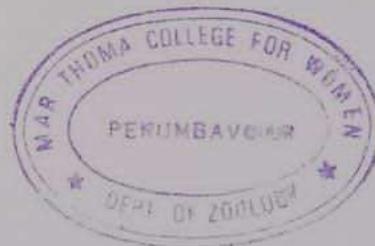
**Mrs. SUNU N.V**

Supervising teacher

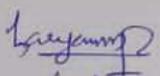
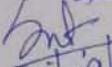
Department of Zoology

Mar Thoma College for Women

Perumbavoor



**EXAMINERS**

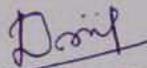
1. Jintumul Raj-P 
2. SONAT JOSEPH   
29/09/22

## DECLARATION

I hereby declare that this dissertation entitled “ **DIVERSITY AND ENDEMISM OF BUTTERFLIES OF MANNAVAN SHOLA OF ANAMUDI SHOLA NATIONAL PARK IN THE WESTERN GHATS** ” submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work carried out by me, under the supervision of **Mrs. Sunu N.V**, Lecturer, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this has been presented earlier for any degree, diploma or similar title of any other university or institution.

Place : Perumbavoor

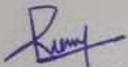
Date : 29/09/2022

  
DEEPIKA Y

**DEPARTMENT OF ZOOLOGY  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

**CERTIFICATE**

This is to certify that the dissertation “**STUDY OF DIVERSITY OF SOME COMMON EDIBLE FISHES IN THE PONNANI FISHING HARBOUR**” is an authentic record of the project work done by Miss. **JASEERA FAIROOSA. P** under my supervision and guidance in partial fulfillment of requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.

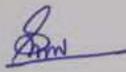


**Dr. REEMY SARA MATHAI**  
Assistant Professor  
Head of Department of Zoology  
Mar Thoma College for Women  
Perumbavoor



**Mrs. JINTUMOL RAJ. P**  
Supervising Teacher  
Department of Zoology  
Mar Thoma College for Women  
Perumbavoor

**Examiners**

1) **SNU N.V** 

2) **Jintumol Raj P** 



## DECLARATION

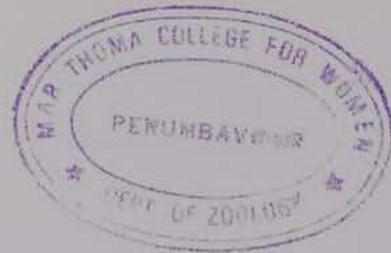
I, KARTHIKA. RAVI, do hereby declare that, the project entitled "A STUDY ON THE ANT DIVERSITY OF WARD 12 VENGOLA PANCHAYATH, ERNAKULAM

to Mahathma Gandhi University, Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work, carried out by me, under the supervision of Athira M, Lecturer, Department of Zoology, Marthoma college for women, Perumbavoor. No part of this has been presented earlier for any degree, diploma or similar title of any other University or institution.

Place:- PERUMBAYOOR

Date:- 29-09-2022

*Karthika*  
KARTHIKA. RAVI



## DECLARATION

I hereby declare that this dissertation entitled "A COMPARATIVE STUDY ON THE ODONATE DIVERSITY OF WETLANDS IN PUZHAKATTIRI PANCHAYATH, MALAPPURAM" submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work carried out by me, under the supervision of MISS ATHIRA.M Lecturer, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this has been presented earlier for any degree, diploma or similar title of any other university or institution.

POOJA KRISHNAN.K

Place: Perumbavoor

Date:.

DEPARTMENT OF ZOOLOGY

MARTHOMA COLLEGE FOR WOMEN, PERUMBAVOOR.

CERTIFICATE

This is to certify that the dissertation "A STUDY ON THE AVIAN DIVERSTIY OF THE PADDY FIELDS IN MARARIKULAM PANCHAYATH, ALAPPUZHA". is an authentic record of the project work done by miss, REVATHY.P.G, during the academic year 2020- 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.



Mrs. REEMY SARA MATHAI

Assistant Professor

Head of the Department Zoology

Marthoma College for Women

Perumbavoor.



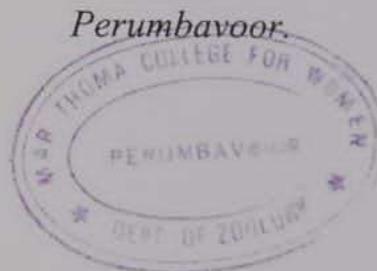
Miss. ATHIRA. M

Supervising teacher

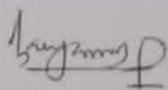
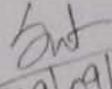
Department of Zoology

Marthoma College for Women,

Perumbavoor.



EXAMINERS

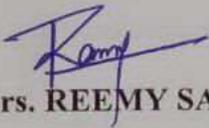
1. JINTUMOL RAJ-P 
2. SONAT JOSEPH   
29/09/2022

DEPARTMENT OF ZOOLOGY

MAR THOMA COLLEGE FOR WOMEN, PERUMBAAVOOR

CERTIFICATE

This is to certify that the dissertation "A COMPARATIVE STUDY ON THE EFFECT OF COPPER SULPHATE & AMMONIUM SULPHATE IN THE GROWTH, SURVIVAL AND REPRODUCTION OF GUPPY (*Poecilia reticulata*)" is an authentic record of the project work done by Miss. SREELAKSHMI S during the academic year 2020 – 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.



Mrs. REEMY SARA MATHAI

Assistant Professor

Head of the Department

Department of Zoology

Mar Thoma College for Women

Perumbavoor

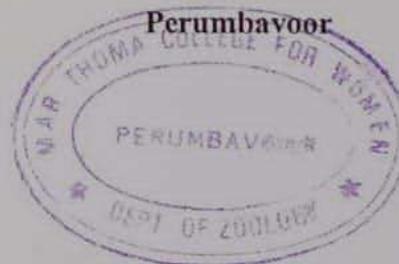


Ms. ATHIRA M

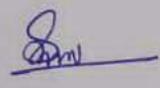
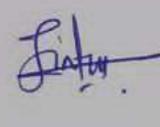
Supervising teacher

Department of Zoology

Mar Thoma College for Women



EXAMINERS

1. SUNU N.V 
2. Jithumon Raj P 

# CERTIFICATE

This is to certify that the dissertation titled " A STUDY ON DIVERSITY OF DRAGONFLIES IN VARAPPETTY PANCHAYATH " is an authentic record of the project work done by Miss SWATHY SASI under my supervision and guidance in partial fulfillment of the requirement of the Degree of Master Zoology and the report has not formed the basis for the award of any degree Or diploma earlier.

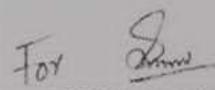
  
Mrs. REEMY SARA MATHAI

Assistant Professor

Head of the Department

Mar Thoma college for women

Perumbavoor

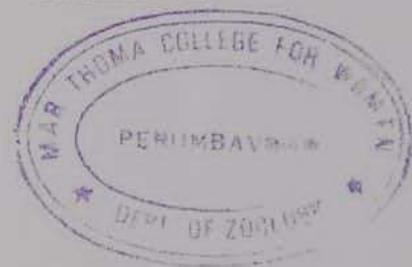
  
Mrs. JISSY THOMAS

Supervising teacher

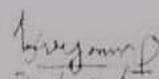
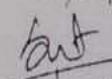
Department of Zoology

Mar Thoma college for women

Perumbavoor



## Examiners :

- 1 JINTUMOL RAS P   
29/09/2022
- 2 SONAT JOSEPH   
29/09/2022.

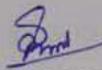
DEPARTMENT OF ZOOLOGY MAR THOMA COLLEGE  
FOR WOMEN PERUMBAVOOR

CERTIFICATE

This is to certify that the dissertation "Study on diversity of fishes in Thannermukombund" is an authentic record of the project work done by Miss. TREESA MARY BOSE under my supervision and guidance in partial fulfillment of requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.

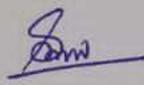


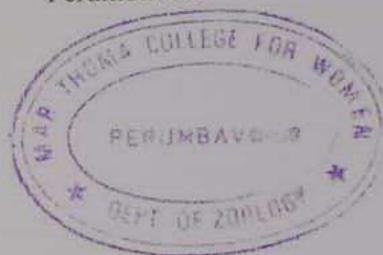
Dr. REEMY SARA MATHAI  
Assistant Professor  
Head of Department of Zoology  
Mar Thoma College for Women  
Perumbavoor



Mrs. SUNU N V  
Supervising Teacher  
Department of Zoology  
Mar Thoma College for Women  
Perumbavoor

Examiners

- 1) SUNU N.V. 
- 2) Fintimo / Raj P. 

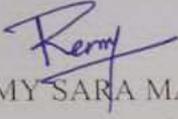


DEPARTMENT OF ZOOLOGY

MAR THOMA COLLEGE FOR WOMEN, PERUMBAAVOOR

CERTIFICATE

This is to certify that the dissertation "A COMPARATIVE STUDY ON THE MOTH (LEPIDOPTERA:HETEROCERA) DIVERSITY IN SELECTED AREAS OF MALAPPURAM AND ERNAKULAM DISTRICTS" is an authentic record of the project work done by miss, VARSHA .V during the academic year 2020- 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.



Mrs. REEMY SARA MATHAI

Assistant Professor

Head of the Department

Department of Zoology

Mar Thoma College for Women,

Perumbavoor



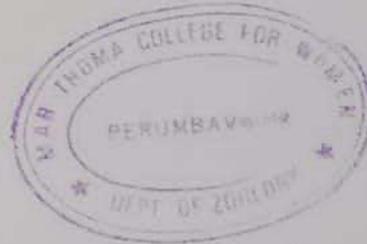
Mrs. SUNU N.V

Supervising teacher

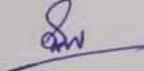
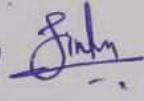
Department of Zoology

Mar Thoma College for Women

Perumbavoor



EXAMINERS

1. SUNU N.V 
2. Jithumon Raj P, 

## DECLARATION

I hereby declare that this dissertation entitled " **A COMPARATIVE STUDY ON THE MOTH (LEPIDOPTERA:HERETOCERA) DIVERSITY IN SELECTED AREAS OF MALAPPURAM AND ERNAKULAM DUSTRICTS**" submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology is a bonafide record of the project work, carried out by me.. under the supervision of Mrs. SUNU N.V, Lecturer, Department of Zoology. Mar Thoma college for Women, Perumbavoor, no part of this has been presented earlier for any diploma, or similar title of any other university or institution.

Place: PERUMBAVOOR

VARSHA.V

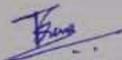
Date:

## DECLARATION

I do here by declare that the dissertation "**Study on diversity of fishes in Thannermukom bund**" is a bonafide record of the project work carried by me, under the supervision of Mrs. SUNU N V, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this work dissertation has been presented earlier for any Degree, Diploma or Similar title of any other University or Institutions.

Place : Perumbavoor

Date :

  
TREESA MARY BOSE

## DECLARATION

I do hereby declare that this project entitled is the record of the study by me, in partial fulfillment of the requirement for the year degree in master of science, Zoology and which I am submitted this project as a record of original work done by me and has not been previously formed on the basis for the award of any academic qualification, fellowship or other similar title of any other university.

SWATHY SASI

Place: Perumbavoor

Date: 29/9 /2022

## DECLARATION

I hereby declare that this dissertation entitled "A COMPARATIVE STUDY ON THE EFFECT OF COPPER SULPHATE & AMMONIUM SULPHATE IN THE GROWTH, SURVIVAL AND REPRODUCTION OF GUPPY (*Poecilia reticulata*)" submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work carried out by me, under the supervision of Ms Athira M, Lecturer, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this has been presented earlier for any degree, diploma or similar title of any other university or institution.

Place : Perumbavoor

SREELAKSHMI S

Date :

## DECLARATION

*I hereby declare that this dissertation entitled "A STUDY ON THE AVIAN DIVERSTIY OF THE PADDY FIELDS IN MARARIKULAM PANCHAYATH, ALAPPUZHA". submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology is a bonafide record of the project work, carried out by me.. under the supervision of Miss. ATHIRA.M, Lecturer, Department of Zoology. Mar Thoma college for Women, Perumbavoor, no part of this has been presented earlier for any diploma, or similar title of any other university or institution.*

Place: PERUMBAVOOR

*Revathy*  
REVATHY.P.G

Date: 29-9-2022

## DECLARATION

I hereby declare that this dissertation entitled “**A STUDY ON THE AVIAN DIVERSITY OF RANDAMPUNCHA WETLAND NEAR MANTHUKA, PATHANAMTHITTA**” submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work carried out by me, under the supervision of **Ms. Athira M**, Lecturer, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this has been presented earlier for any degree, diploma or similar title of any other university or institution.

Place: Perumbavoor

RESHMA R KURUP

Date:

**DEPARTMENT OF ZOOLOGY**  
**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

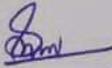
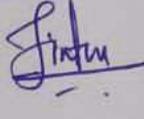
**CERTIFICATE**

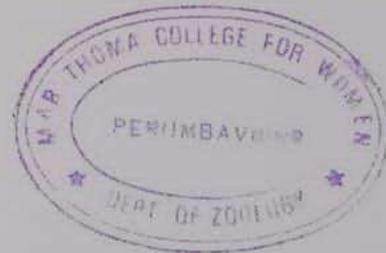
*This is to certify that the dissertation "A STUDY ON THE AVIAN DIVERSITY OF RANDAMPUNCHA WETLAND NEAR MANTHUKA, PATHANAMTHITTA" is an authentic record of the project work done by Miss. RESHMA R KURUP during the academic year 2020 – 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.*

  
**Mrs. REEMY SARA MATHAI**  
Assistant Professor  
Head of the Department  
Department of Zoology  
Mar Thoma College for Women  
Perumbavoor

  
**Ms. ATHIRA.M**  
Supervising teacher  
Department of Zoology  
Mar Thoma College for Women  
Perumbavoor

**EXAMINERS**

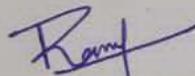
1. **SUNU N-V** 
2. **Jintuna Raj P,** 



DEPARTMENT OF ZOOLOGY  
MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

CERTIFICATE

*This is to certify that the dissertation "A COMPARATIVE STUDY ON THE ODONATE DIVERSITY OF WETLANDS IN PUZHAKATTIRI PANCHAYATH, MALAPPURAM "*  
*is an authentic record of the project work done by Miss. POOJA KRISHNAN K during the academic year 2020-2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.*



Mrs. REEMY SARA MATHAI.

Assistant Professor.

Head of the Department.

Department of Zoology.

Mar Thoma College for Women.

Perumbavoor



MISS ATHIRA M

Supervising Teacher

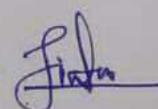
Department of Zoology

Mar Thoma College for Women

Perumbavoor

EXAMINERS

1. SUNU N.V 

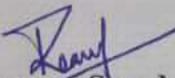
2. Jithumon Raj P, 



**DEPARTMENT OF ZOOLOGY**  
**MARTHOMA COLLEGE FOR WOMEN PERUMBAVOOR**

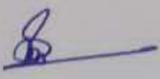
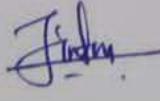
**CERTIFICATE**

This is to certify that the dissertation entitled "A SURVEY ON ANT DIVERSITY IN DIFFERENT AREAS OF THURUTHIPLY, VARDNO.12, VENGOLA" an authenticated record of project work carried out by "KARTHIKA. RAVI" during the Academic year 2021-2022 under my supervision and guidance in the Department of Zoology, in partial fulfillment of the requirement of the degree of Master of Science in Zoology and this report has not formed the basis for the award of any degree or diploma earlier.

  
Mrs. Reemy Sara Mathai  
Assistant professor  
Head of the Department  
Department of zoology  
Marthoma college for women

  
Mrs. Athira. M.  
Supervising Teacher  
Department of Zoology  
Marthoma college for  
Women, perumbavoor

**Examiners**

- 1) SUNU NV , 
- 2) Jintanal R P , 

## **DECLARATION**

I do here by declare that the dissertation "**STUDY OF DIVERSITY OF SOME COMMON EDIBLE FISHES IN THE PONNANI FISHING HARBOUR**" is a bonafide record of the project work carried by me, under the supervision of Mrs. **JINTUMOL RAJ. P**, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this work dissertation has been presented earlier for any Degree, Diploma or Similar title of any other University or Institutions.

Place : Perumbavoor

**JASEERA FAIROOSA. P**

Date :

# CERTIFICATE

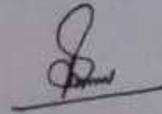
This is to certify that the dissertation entitled “ **STUDY OF BIRD DIVERSITY IN THE KALADY RANGE OF MALAYATTOR FOREST DIVISION**” is an authentic record of the project work done by **Miss ASWATHY VIJAYAN** under my supervision and guidance in partial fulfillment of the requirement of the Degree of Master of Science in Zoology and this report has not formed on the basis of any award of degree or diploma earlier.



**Mrs. Reemy Sara Mathai**

Head of the Department of Zoology

Mar Thoma College for Women



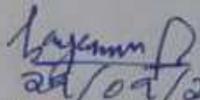
**Mrs. Sunu N V**

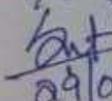
Supervising teacher

Department of Zoology

Mar Thoma College for

Women

Jintunol Raj P   
28/09/2022

SONAF JOSEPH   
29/09/22

Signature of Examiners

Place:

Date:

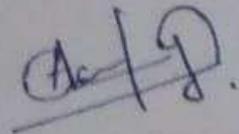
## DECLARATION

I hereby declare that this dissertation entitled "STUDY OF BIRD DIVERSITY IN THE KALADY RANGE OF MALAYATTOR FOREST DIVISION" submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work carried out by me, under the supervision of Mrs. Sunu N.V, Lecturer, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this has been presented earlier for any degree, diploma or similar title of any other university or institution.

Place : Perumbavoor

ASWATHY VIJAYAN

Date : 29/8/2022



DEPARTMENT OF ZOOLOGY

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

CERTIFICATE

*This is to certify that the dissertation " CONSERVATION OF BUTTERFLIES THROUGH BUTTERFLY GARDEN, is an authentic record of the project work done by Miss. DIVYA K S, under my supervision and guidance in partial fulfillment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.*

  
Mrs. REEMY SARA MATHAI

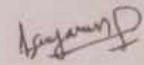
Assistant Professor

Head of the department

Department of Zoology

Mar Thoma College for Women

Perumbavoor

  
Mrs. JINTUMOL.RAJ.P

Supervising teacher

Department of Zoology

Mar Thoma College for Women

Perumbavoor

Examiners: 1) SONAT JOSEPH  29/09/2022  
2) SUNU N. V  29/09/2022

## DECLARATION

*I DIVYA K S hereby declare that the dissertation entitled " CONSERVATION OF BUTTERFLIES THROUGH BUTTERFLY GARDEN" to Mahatma Gandhi University, Kottayam in partial fulfillment of the Master of Science in Zoology ,is a bonafied record of studies carried out by me under the guidance and supervision of Mrs. JINTUMOL.RAJ P , Department of Zoology ,Mar Thoma College For women Perumbavoor, and that it has previously formed on the basis for the award of any academic qualification, fellowship or other similar title of any other university.*

Place: Perumbavoor

DIVYA KS

Date: 29/9/2022

**DEPARTMENT OF ZOOLOGY**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAAVOOR**

**CERTIFICATE**

*This is to certify that the dissertation “ BUTTERFLY DIVERSITY AND THEIR HOST PLANTS INTERACTION IN IRINGOLKAVU ” is an authentic record of the project work done by Miss. Fasana during the academic year 2020 – 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.*

**Mrs. REEMY SARA MATHAI**

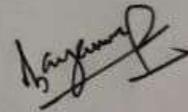
Assistant Professor

Head of the Department

Department of Zoology

Mar Thoma College for Women

Perumbavoor



**Mrs. JINTU MOL RAJ P**

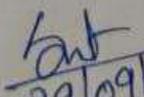
Supervising teacher

Department of Zoology

Mar Thoma College for Women

Perumbavoor

**EXAMINERS**

1. SONAT JOSEPH   
29/09/2022
2. SUNU N.V   
29/09/2022

## DECLARATION

I hereby declare that this dissertation entitled “**BUTTERFLY DIVERSITY AND THEIR HOST PLANTS INTERACTION IN IRINGOLKAVU** ” submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work carried out by me, under the supervision of **Mrs. Jintu mol Raj Lecturer, Department of Zoology, Mar Thoma College for Women, Perumbavoor.** No part of this has been presented earlier for any degree, diploma or similar title of any other university or institution.

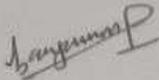
Place : Perumbavoor

Fate :

DEPARTMENT OF ZOOLOGY  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR  
CERTIFICATE

*This is to certify that the dissertation " COMPARATIVE STUDY ON ANT DIVERSITY IN THOMMANKUTHU FOREST AREA ,RUBBER PLANTATION AND PINEAPPLE PLANTATION" is an authentic record of the project work done by miss. JITTO JOY during the academic year 2021-2022, under my supervision and guidance in partial fulfillment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.*

  
Mrs. REEMY SARA MATHAI  
Assistant Professor  
Head of the Department of Zoology  
Mar Thoma College for women Perumbavoor

  
Mrs. JINTUMOL RAJ .P  
Supervising teacher  
Department of Zoology  
Mar Thoma college for women

EXAMINERS

- 1 SONAT JOSEPH   
29/09/2022
- 2 SUNU N.V   
29/09/2022

## DECLARATION

*I hereby declare that the dissertation entitled "COMPARATIVE STUDY ON ANT DIVERSITY IN THOMMANKUTHU FOREST AREA ,RUBBER PLANTATION AND PINNEAPPLE PLANTATION" submitted to Mahatma Gandhi University, Kottayam in partial fulfillment for the award of Master of Science in Zoology, is a bonafide record of studies carried out by me under the supervision of Mrs. JINTUMOL RAJ .P Lecturer, Department of zoology, Mar Thoma college for Women, Perumbavoor, and that it has previously formed the basis for the award of any degree or diploma.*

Place: Perumbavoor

JITTO JOY

Date:

DEPARTMENT OF ZOOLOGY  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAAVOOR

CERTIFICATE

This is to certify that the dissertation "A COMPARITIVE STUDY ON THE LITTER FAUNA DIVERSITY IN MULTICROP AND MONOCROP AGROECOSYSTEMS IN MAZHUVANNOOR PANCHAYATH, ERNAKULAM" is an authentic record of the project work done by miss, SHALU REJU during the academic year 2020- 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.



Mrs. REEMY SARA MATHAI

Assistant professor

Head of department zoology

Marthoma College for women,

Perumbavoor



Miss ATHIRA M

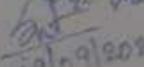
supervising teacher

department of zoology

Marthoma College for women,

Perumbavoor

EXAMINERS

1. JINTUMOL RAJ P   
29/09/2022
2. SONAT JOSEPH   
29/09/2022

## DECLARATION

I hereby declare that this dissertation entitled " *A COMPARITIVE STUDY ON THE LITTER FAUNA DIVERSITY IN MULTICROP AND MONOCROP AGROECOSYSTEMS IN MAZHUVANNOOR PANCHAYATH, ERNAKULAM*" submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology is a bonafide record of the project work, carried out by me.. under the supervision of Miss. ATHIRA M, Lecturer, Department of Zoology, Mar Thoma college for Women, Perumbavoor, no part of this has been presented earlier for any diploma, or similar title of any other university or institution.

Place: PERUMBAVOOR

  
SHALU REJU

Date: 29-9-2022

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

CERTIFICATE

This is to certify that the dissertation " A COMPARITIVE STUDY ON THE SEASONAL DIVERSITY OF COLEOPTERA IN IRINGOL KAVU EVERGREEN FOREST, ERNAKULAM" is an authentic record of the project work done by Miss. DEEPIKA Y during the academic year 2020 – 2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.



Mrs. REEMY SARA MATHAI

Assistant Professor

Head of the Department

Department of Zoology

Mar Thoma College for Women

Perumbavoor



Mrs. JISSY THOMAS

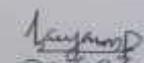
Supervising teacher

Department of Zoology

Mar Thoma College for Women

Perumbavoor

EXAMINERS

1. JINTUMOL RAS P   
29/09/2022
2. SONAT JOSEPH   
29/09/2022

### DECLARATION

I hereby declare that this dissertation entitled " A COMPARITIVE STUDY ON THE SEASONAL DIVERSITY OF COLEOPTERA IN IRINGOL KAVU EVERGREEN FOREST, ERNAKULAM" submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work carried out by me, under the supervision of Mrs. JISSY THOMAS, Lecturer, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this has been presented earlier for any degree, diploma or similar title of any other university or institution.

Place : Perumbavoor

  
SWATHY SAJIKUMAR

Date :

DEPARTMENT OF ZOOLOGY

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR

CERTIFICATE

This is to certify that the dissertation "A COMPARATIVE STUDY ON THE BUTTERFLY DIVERSITY IN PALLARIMANGALAM PANCHAYATH AND VARAPPETTY PANCHAYATH OF ERNAKULAM DISTRICT KERALA" is an authentic record of the project work done by Miss. THASNI P M during the academic year 2020-2022, under my supervision and guidance in partial fulfilment of the requirement of the Degree of Master of Zoology and the report has not formed the basis for the award of any degree or diploma earlier.

Mrs. REEMY SARA MATHAI

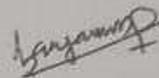
Assistant Professor

Head of the Department

Department of Zoology

Mar Thoma College for Women

Perumbavoor



Mrs. JINTUMOL RAJ P

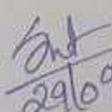
Supervising teacher

Department of Zoology

Mar Thoma College for Women

Perumbavoor

EXAMINERS

1. SONAT JOSEPH   
29/09/2022
- 2.

## DECLARATION

I hereby declare that this dissertation entitled "A COMPARATIVE STUDY ON THE BUTTERFLY DIVERSITY IN PALLARIMANGALAM PANCHAYATH AND VARAPPETTY PANCHAYATH OF ERNAKULAM DISTRICT KERALA" submitted to Mahatma Gandhi University Kottayam in the partial fulfilment for the award of Master of Science in Zoology, is a bonafide record of the project work carried out by me, under the supervision of Mrs. Jintumol Raj P, Lecturer, Department of Zoology, Mar Thoma College for Women, Perumbavoor. No part of this has been presented earlier for any degree, diploma or similar title of any other university or institution.

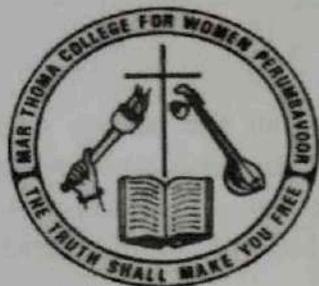
Place : Perumbavoor

THASNI P M

Date :

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



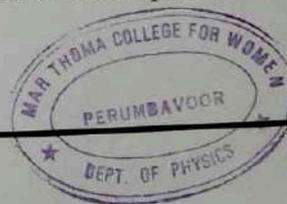
**CERTIFICATE**

This is to certify that the project report entitled "**Synthesis of Iron Oxide Nano particles using coir fibre extracts**" is the bonafide work carried out by Ms. Anjima D. under my guidance and supervision, as part of the curriculum of Integrated Programme in Basic Science Physics under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

Project Guide

DR. MARY VARGHESE  
Principal in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

Head of the Department

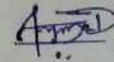


## DECLARATION

I, Anjima D., do hereby declare that this project report entitled "**Synthesis of Iron Oxide Nano particles using coir fibre extracts**" is a based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

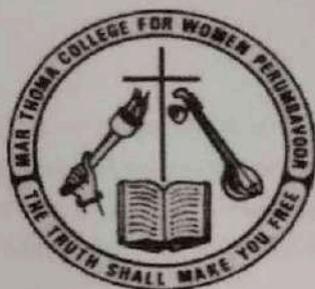
Signature:



Date: 12/4/2022

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)

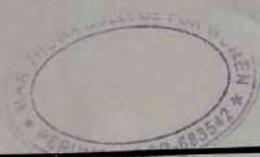


**CERTIFICATE**

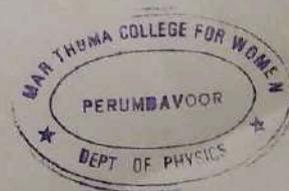
This is to certify that the project report entitled "**Synthesis of Copper Oxide Nano particles**" is the bonafide work carried out by Ms. Krishnendu K.K. under my guidance and supervision, as part of the curriculum of Integrated Programme in Basic Science Physics under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

*Rajani Jacob*  
Project Guide

*(Signature)*  
Head of the Department



*(Signature)*  
DR. SUCY MARY VARGHESE  
Principal - in-charge  
Mar Thoma College For Women  
Perumbavoor - 689 542



## DECLARATION

I, Krishnendu K. K., do hereby declare that this project report entitled "**Synthesis of Copper Oxide Nano particles**" is a based on the original work and carried out by me under the Guidance of **Dr. Rajani Jacob**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Signature: 

Date: 12/04/2022

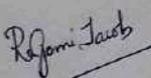
DEPARTMENT OF PHYSICS  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR  
(Affiliated to Mahatma Gandhi University)



CERTIFICATE

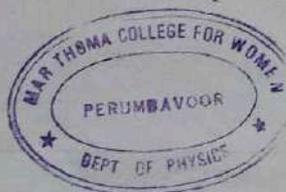
This is to certify that the project report entitled "HOME ENERGY AUDIT" is the bonafide work carried out by Ms. KHADEEJAM.H (Reg.no:190021041539) under my guidance and supervision during 2021-2022, in partial fulfillment of the requirement for the award of the Degree of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

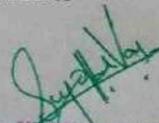
Viva Voice Examination Held on 18/05/2022.....

  
Project Guide

  
Head of the Department

  
External Examiner



  
DR. SIO MARY VARGHESE  
Principal in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

## DECLARATION

I, KHADEEJA M.H do hereby declare that this project report entitled "HOME ENERGY AUDIT" is a based on the original work and carried out by me under TheGuidance of Dr.RajaniJacob, Department of Physics, Mar Thoma College forWomen, Perumbavoor.

KHADEEJA M.H

Khadeeja

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



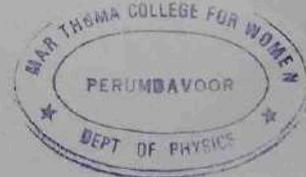
**CERTIFICATE**

This is to certify that the project report entitled "**Experiment to find Stefan's Constant**" is the bonafide work carried out by Ms. Ramseena Shameer under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

*Rajini Jacob*  
Project Guide

*[Signature]*  
Head of the Department

*[Signature]*  
DR. SUPRIYA VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



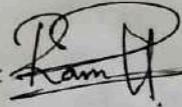
## DECLARATION

I, Ramseena Shameer, do hereby declare that this project report entitled "**Experiment to find Stefan's Constant**" is based on the original work and carried out by me under the Guidance of **Dr. Rajani Jacob**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Date: 12/4/2022

Signature:



**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



**CERTIFICATE**

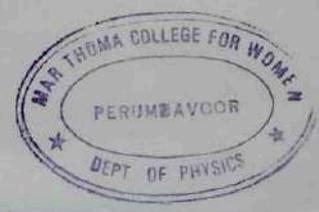
This is to certify that the project report entitled “**Synthesis Of Silver Nano Particles Using Coir Fibre Extracts**” is the bonafide work carried out by Ms. Ameena M. K. under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

Project Guide

Head of the Department



DR. SUJITHA VARGHESE  
Principal in charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



## DECLARATION

I, **Ameena M. K.** do hereby declare that this project report entitled "**Synthesis Of Silver Nano Particles Using Coir Fibre Extracts**" is a based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Signature: 

Date: 12/4/2022

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

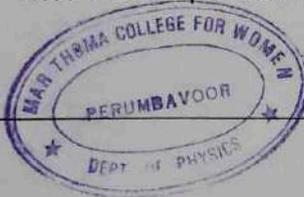
This is to certify that the project report entitled "ENERGY AUDIT – INSTITUTION 2021-22" is the bonafide work carried out by Ms. FATHIMA T.S (Reg.no:190021041537) under my guidance and supervision during 2021-2022, in partial fulfilment the requirement for the award of the Degree of Bachelor of Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

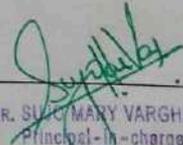
Viva Voice Examination Held on 18/05/2022.....

  
Project Guide

  
Head of the Department

  
External Examiner

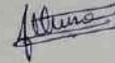


  
DR. S. MARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

## DECLARATION

I FATHIMA T.S do hereby declare that this project report entitled "ENERGY AUDIT – INSTITUTION 2021-22" is a based on the original work and carried out by me under the Guidance of Dr. Anupama P, Assistant Professor, Department Of Physics, Mar Thoma College for Women, Perumbavoor.

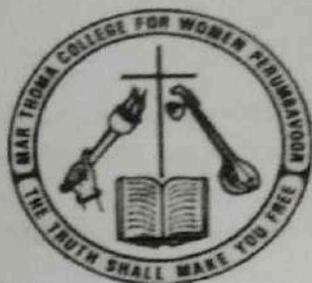
Date 18-5-2022  
Place Perumbavoor



FATHIMA T.S

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)

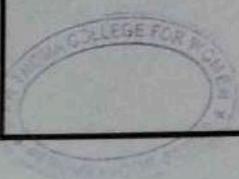


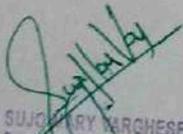
**CERTIFICATE**

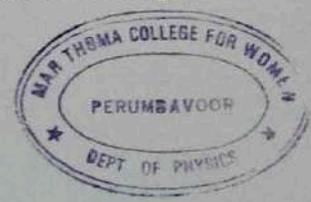
This is to certify that the project report entitled **“Wireless EV Charging Station”** is the bonafide work carried out by Ms. Shahima Shahazada under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

  
Project Guide

  
Head of the Department



  
DR. SUJITHY VARGHESE  
Principal in-charge  
Mar Thoma College For Women  
Perumbaroor - 689 542



## DECLARATION

I, Shahima Shahazada, do hereby declare that this project report entitled "**Wireless EV Charging Station**" is based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

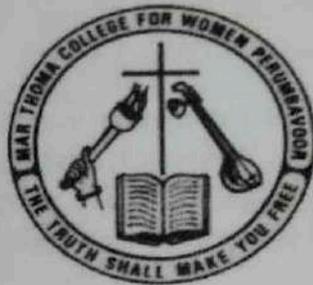
Date: 12/4/2022

Signature:

Shahi

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



**CERTIFICATE**

This is to certify that the project report entitled “**Experiment to find Stefan's Constant**” is the bonafide work carried out by Ms. Alfiya Kareem under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

*Alfiya Kareem*

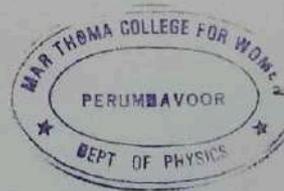
Project Guide

*Dr. Sujitha Warghese*

Head of the Department



*Dr. Sujitha Warghese*  
DR. SUJITHA WARGHESE  
Principal - in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



## DECLARATION

I, Alfiya Kareem, do hereby declare that this project report entitled "**Experiment to find Stefan's Constant**" is based on the original work and carried out by me under the Guidance of **Dr. Rajani Jacob**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Signature: *Alfiya*

Date: 12 / 4 / 2022

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

This is to certify that the project report entitled "ENERGY AUDIT – INSTITUTION 2021-22" is the bonafide work carried out by Ms. FATHIMA HAMSA (Reg.no:190021041536) under my guidance and supervision during 2021-2022, in partial fulfilment the requirement for the award of the Degree of Bachelor of Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

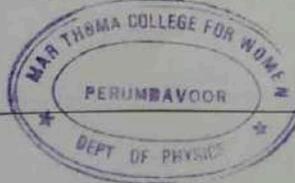
Viva Voice Examination Held on 18/05/2022

*[Signature]*  
Dr. SUDHAKAR VARONER  
Principal-in-charge  
Mar Thoma College For Women  
Perumbevoor - 683 542

*[Signature]*  
Project Guide

*[Signature]*  
Head of the Department

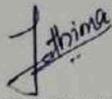
*[Signature]*  
External Examiner



## DECLARATION

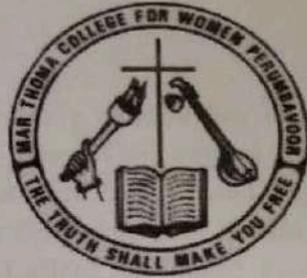
I FATHIMA HAMSA do hereby declare that this project report entitled "**ENERGY AUDIT – INSTITUTION 2021-22**" is based on the original work and carried out by me under the Guidance of Dr. Anupama P, Assistant Professor, Department Of Physics, Mar Thoma College for Women, Perumbavoor.

Date 18/5/22  
Place perumbavoor

  
FATHIMA HAMSA

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)

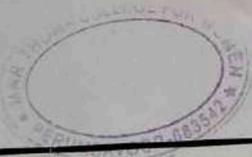


**CERTIFICATE**

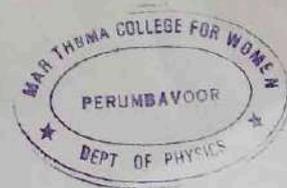
This is to certify that the project report entitled "**Determination of the Mass of the Jupiter from the Orbital data of its Moons using Stellarium**" is the bonafide work carried out by Ms. Nithuna Rajan. under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

*Rajani Jacob*  
Project Guide

*CS*  
Head of the Department



*S. Mary Varghese*  
DR. S. MARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 689 542



## DECLARATION

I, **Nithuna Rajan**, do hereby declare that this project report entitled "**Determination of the Mass of the Jupiter from the Orbital data of its Moons using Stellarium** " is a based on the original work and carried out by me under the Guidance of **Dr. Rajani Jacob**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

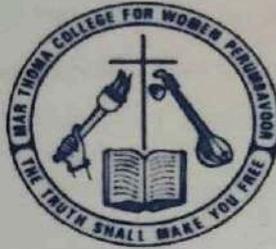
Place: Perumbavoor

Signature: *Nithuna*

Date: *18.05.2022*

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

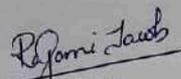
(Affiliated to Mahatma Gandhi University)



## CERTIFICATE

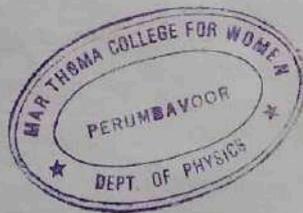
This is to certify that the project report entitled "HOME ENERGY AUDIT" is the bonafide work carried out by Ms. SURYA M.C (Reg.no:190021041541) Under my guidance and supervision during 2021-2022, in partial fulfilment the requirement for the award of the Degree of Bachelor of Science (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

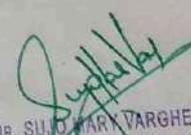
Viva Voice Examination Held on ...18/05/2022.....

  
Project Guide

  
Head of the Department

  
External Examiner



  
DR. SUJOMY VARGHESE  
Principal-In-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

## DECLARATION

I Surya me do hereby declare that this project report entitled "HOME ENERGY AUDIT" is a based on the original work and carried out by me under the Guidance of Dr. Rajani Jacob Department of Physics, Mar Thoma College for Women, Perumbavoor.

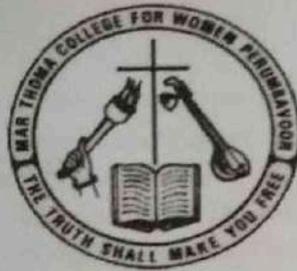
Date : 18/5/22

Place : perumbavoor

  
SURYA M.C

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



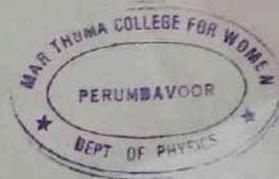
**CERTIFICATE**

This is to certify that the project report entitled "**Determination of the Mass of the Jupiter from the Orbital data of its Moons using Stellarium**" is the bonafide work carried out by Ms. Daya Das P. K. under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

*Refani Jacob*  
Project Guide

*CS*  
Head of the Department

*Dr. S. Mary Varghese*  
DR. S. MARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 842



## DECLARATION

I, **Daya Das P. K.**, do hereby declare that this project report entitled "**Determination of the Mass of the Jupiter from the Orbital data of its Moons using Stellarium** " is a based on the original work and carried out by me under the Guidance of **Dr. Rajani Jacob**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

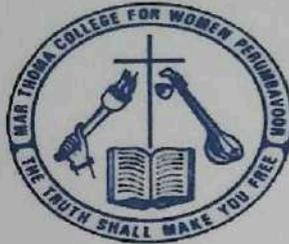
Date: 12.06.2022



Signature:

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

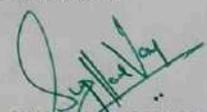
(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

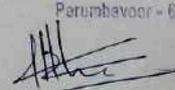
This is to certify that the project report entitled "**ENERGY AUDIT – INSTITUTION 2021-22**" is the bonafide work carried out by Ms. AKHINA K SUDHEESH (Reg.no:190021041534) under my guidance and supervision during 2021-2022, in partial fulfilment the requirement for the award of the Degree of Bachelor of Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

Viva Voice Examination Held on 18/05/2022

  
DR. SUJO MARY VARGHESE  
Principal in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

  
Project Guide

  
Head of the Department

  
External Examiner



## DECLARATION

I, AKHINA K SUDHEESH do hereby declare that this project report entitled "ENERGY AUDIT – INSTITUTION 2021-22" is based on the original work and carried out by me under the Guidance of Dr. Anupama P, Assistant Professor, Department Of Physics, Mar Thoma College for Women, Perumbavoor.

Date 18-5-2022  
Place Perumbavoor

  
AKHINA K SUDHEESH

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

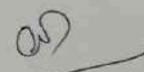
(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



**CERTIFICATE**

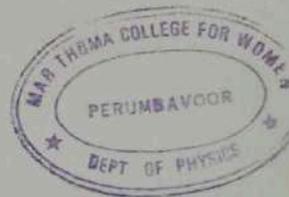
This is to certify that the project report entitled "**Wireless EV Charging Station**" is the bonafide work carried out by Ms. Syamini Sasi under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

  
Project Guide

  
Head of the Department



  
DR. SUSHRUTHA VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 603 542



## DECLARATION

I, Syamini Sasi, do hereby declare that this project report entitled "**Wireless EV Charging Station**" is based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

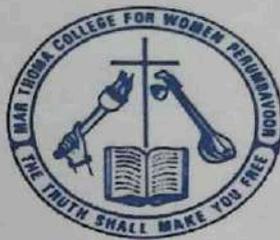
Date: 12/04/2022

Signature:



**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

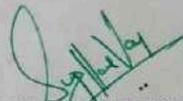
(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

This is to certify that the project report entitled "ENERGY AUDIT – INSTITUTION 2021-22" is the bonafide work carried out by Ms. AKHINA K SUDHEESH (Reg.no:190021041534) under my guidance and supervision during 2021-2022, in partial fulfilment the requirement for the award of the Degree of Bachelor of Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

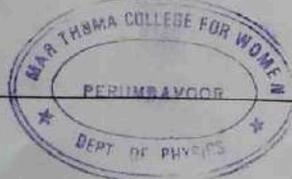
Viva Voice Examination Held on 18/05/2022

  
DR. SUJOMARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

  
Project Guide

  
Head of the Department

  
External Examiner



## DECLARATION

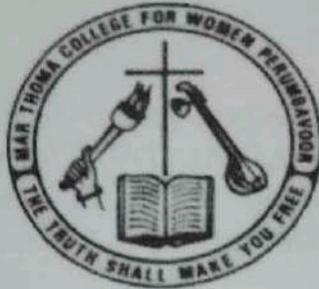
I, AKHINA K SUDHEESH do hereby declare that this project report entitled "**ENERGY AUDIT – INSTITUTION 2021-22**" is based on the original work and carried out by me under the Guidance of Dr. Anupama P, Assistant Professor, Department Of Physics, Mar Thoma College for Women, Perumbavoor.

Date 18-5-2022  
Place Perumbavoor

  
AKHINA K SUDHEESH

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



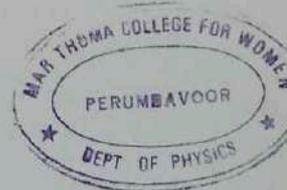
**CERTIFICATE**

This is to certify that the project report entitled "**CARBON FOOTPRINT ANALYSIS**" is the bonafide work carried out by Ms. Treesa Maria Stanley under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

Project Guide

Head of the Department

DR. SUJOY MARY VARGHESE  
Principal - in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



## DECLARATION

I, **Treesa Maria Stanly** do hereby declare that this project report entitled "**CARBON FOOTPRINT ANALYSIS**" is a based on the original work and carried out by me under the Guidance of **Dr. Anupama P.**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

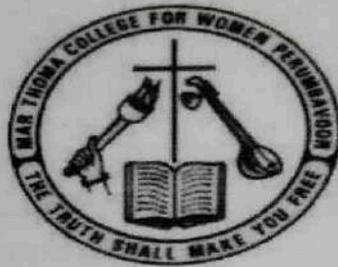
Place: Perumbavoor

Signature: 

Date: 12/04/2022

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



## CERTIFICATE

This is to certify that the project report entitled "**HOME ENERGY AUDIT**" is the bonafide work carried out by Ms. ADHILA KS (Reg.no:190021041542) under my guidance and supervision during 2021-2022, in partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

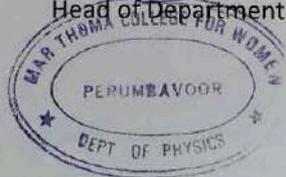
Viva Voice Examination Held on 18/05/2022

*Rafoni Jacob*  
Project Guide

*AD*  
Head of Department

*[Signature]*  
External Examiner

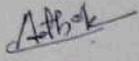
*[Signature]*  
DR. SUJO MARY VARGHESE  
Principal in-charge  
Mar Thoma College For Women  
Perumbavoor - 680 542



# DECLARATION

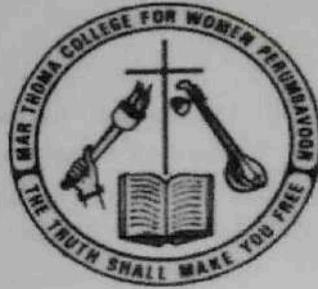
I, ADHILA KS do hereby declare that this project report entitled "HOME ENERGY AUDIT" is based on the original work and carried out by me under the Guidance of Dr. Rajani Jacob Department of Physics, Mar Thoma College for Women, Perumbavoor

Date: 18/05/2022  
Place: perumbavoor

  
Adhila K S

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)

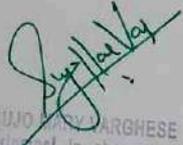


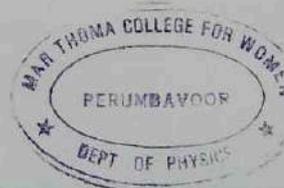
**CERTIFICATE**

This is to certify that the project report entitled "**Resistivity of a semiconductor using four probe analysis**" is the bonafide work carried out by Ms. Ansila Anas under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

  
Project Guide

  
Head of the Department

  
DR. SUJATHA VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 693 612



## DECLARATION

I, **Ansila Anas**, do hereby declare that this project report entitled "**Resistivity of a semiconductor using four probe analysis**" is based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Signature: 

Date: 12/04/2022

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



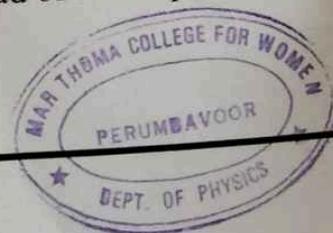
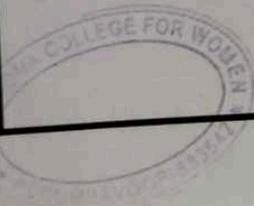
**CERTIFICATE**

This is to certify that the project report entitled "**Synthesis of Iron Oxide Nano particles using coir fibre extracts**" is the bonafide work carried out by Ms. Laya S Pillai under my guidance and supervision, as part of the curriculum of Integrated Programme in Basic Science Physics under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

  
Project Guide

  
DR. MARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

  
Head of the Department



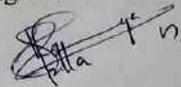
## DECLARATION

I, Laya S Pillai, do hereby declare that this project report entitled "**Synthesis of Iron Oxide Nano particles using coir fibre extracts**" is a based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

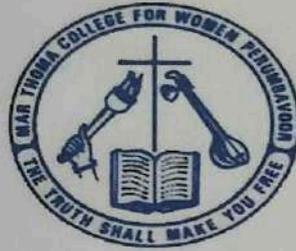
Date: 12.04.2022

Signature:

Handwritten signature of Laya S Pillai, written in black ink. The signature is stylized and includes the name 'Laya S Pillai'.

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

This is to certify that the project report entitled **"ENERGY AUDIT – INSTITUTION 2021-22"** is the bonafide work carried out by Ms. ANU PAUL (Reg.no:190021041535) under my guidance and supervision during 2021-2022, in partial fulfilment the requirement for the award of the Degree of Bachelor of Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

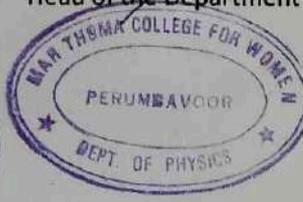
Viva Voice Examination Held on 18/05/22.....

Project Guide

Head of the Department

External Examiner

DR. SURESH VARGHESE  
Principal-In-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



## DECLARATION

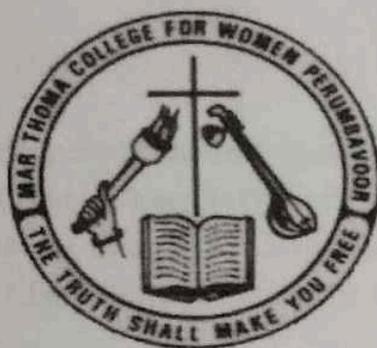
I, ANU PAUL do hereby declare that this project report entitled "ENERGY AUDIT – INSTITUTION 2021-22" is based on the original work and carried out by me under the Guidance of Dr. Anupama P, Assistant Professor, Department Of Physics, Mar Thoma College for Women, Perumbavoor.

Date 18/5/2022  
Place Perumbavoor

Anu Paul  
ANU PAUL

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



**CERTIFICATE**

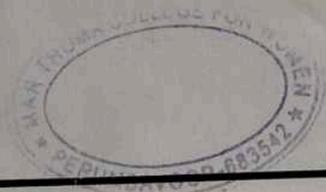
This is to certify that the project report entitled "**Synthesis of Copper Oxide Nano particles**" is the bonafide work carried out by Ms. Lucy Sneha George under my guidance and supervision, as part of the curriculum of Integrated Programme in Basic Science Physics under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

*Rejani Jacob*

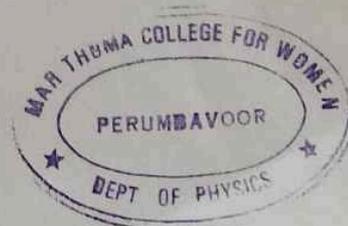
Project Guide

*AS*

Head of the Department



*Sybil*  
DR. SIBY MARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683542



## DECLARATION

I, Lucy Sneha George, do hereby declare that this project report entitled “**Synthesis of Copper Oxide Nano particles**” is a based on the original work and carried out by me under the Guidance of **Dr. Rajani Jacob**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

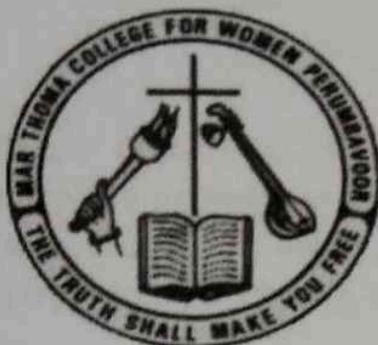
Date: 12.04.2022

Signature:



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



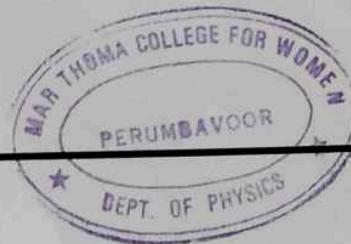
## CERTIFICATE

This is to certify that the project report entitled “**Synthesis of Iron Oxide Nano particles using coir fibre extracts**” is the bonafide work carried out by Ms. Krishna V. S. under my guidance and supervision, as part of the curriculum of Integrated Programme in Basic Science Physics under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

Project Guide

DR. MARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

Head of the Department

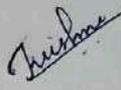


## DECLARATION

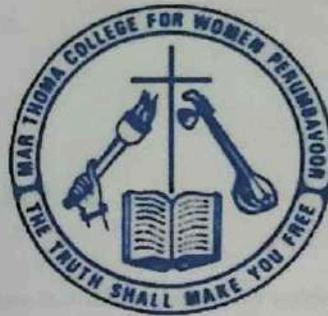
I, Krishna V. S., do hereby declare that this project report entitled "**Synthesis of Iron Oxide Nano particles using coir fibre extracts**" is a based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Date: 12/04/2022.

Signature: 

**Mar Thoma College for Women Perumbavoor**  
(Affiliated to Mahatma Gandhi University)



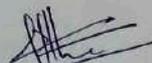
**CERTIFICATE**

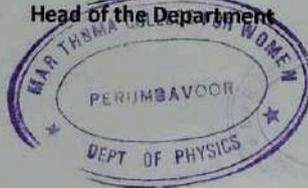
This is to certify that the project report entitled "INDUSTRIAL ENERGY AUDIT" is the bonafide work carried out by Ms. Farsana Ashraf (Reg.no:190021041547) under My guidance and supervision during 2021-2022, in partial fulfilment of the Requirement for the award of the Degree of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

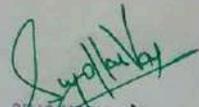
Viva Voice Examination Held on 18/05/2022

  
Project Guide

  
Head of the Department

  
External Examiner



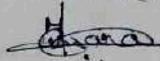
  
DR. S. J. VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

### Declaration

I Farsana Ashraf hereby declare that this project report entitled "REPORT ON ENERGY AUDIT PROGRAM " has been prepared by us during the year 2022, under the guidance of Dr. Melvi Chandy ,Department Physics, Mar Thoma college for women Perumbavoor.

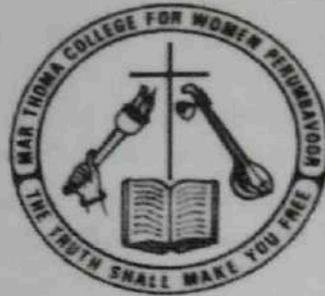
Place : Perumbavoor

Date: 18/5/2022

Farsana Ashraf  


**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



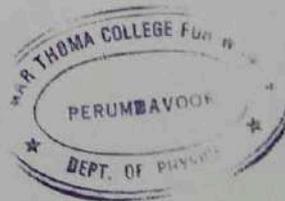
**CERTIFICATE**

This is to certify that the project report entitled “**Wireless EV Charging Station**” is the bonafide work carried out by Ms. Revathy Rajeev under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

Project Guide

DR. SUJAMARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

Head of the Department



## DECLARATION

I, Revathy Rajeev, do hereby declare that this project report entitled "**Wireless EV Charging Station**" is based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

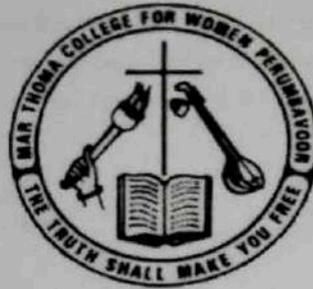
Place: Perumbavoor

Date:

Signature:



MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR  
(Affiliated to Mahatma Gandhi University)



CERTIFICATE

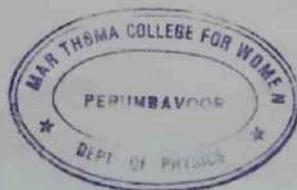
This is to certify that the project report entitled "**HOME ENERGY AUDIT**" is the bonafide work carried out by Ms. Afrin M K (Reg.no:190021041543) under my guidance and supervision during 2021-2022, in partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

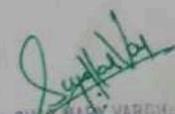
Viva Voice Examination Held on 18/05/2022.....

  
Project Guide  
Examiner

  
Head of the Department

  
External



  
DR. SUSAN MARY VARGHESE  
Principal in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

## DECLARATION

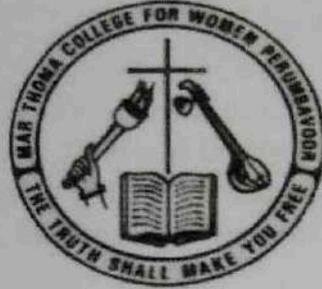
I, Afrin M K do hereby declare that this project report entitled "HOME ENERGY AUDIT" is based on the original work and carried out by me under the Guidance of Dr. Paulose Thomas Department of Physics, Mar Thoma College for Women, Perumbavoor

Date: 18-5-22  
Place: perumbavoor

  
AFRIN M K

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



**CERTIFICATE**

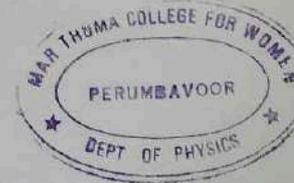
This is to certify that the project report entitled "**Dielectric Constant of a Solid and Liquid**" is the bonafide work carried out by Ms. Nandana Jayan under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

Project Guide

Head of the Department



DR. SUJO MARY ARGESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 547



## DECLARATION

I, Nandana Jayan, do hereby declare that this project report entitled "**Dielectric Constant of a Solid and Liquid**" is based on the original work and carried out by me under the Guidance of **Dr. Paulose Thomas**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

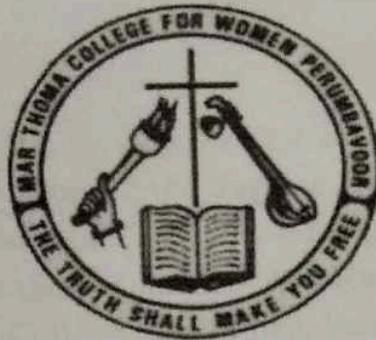
Place: Perumbavoor

Signature: 

Date: 12 | 4 | 20 22

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

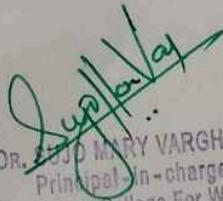
(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



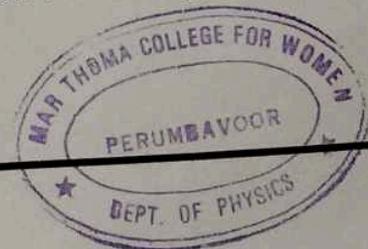
## CERTIFICATE

This is to certify that the project report entitled "**Determination of the Mass of the Jupiter from the Orbital data of its Moons using Stellarium**" is the bonafide work carried out by Ms. Shahanas T. S. under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

  
Project Guide

  
DR. P. M. VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

  
Head of the Department



## DECLARATION

I, Shahanas T. S., do hereby declare that this project report entitled "**Determination of the Mass of the Jupiter from the Orbital data of its Moons using Stellarium**" is based on the original work and carried out by me under the Guidance of **Dr. Rajani Jacob**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Date: 12 | 4 | 2022

Signature: 

# MAR THOMA COLLEGE FOR WOMEN

## PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



### CERTIFICATE

This is to certify that the project report entitled "**HOME ENERGY AUDIT**" is the bonafide work carried out by Ms. AKHILENDU. T. ANIL (Reg.no:190021041544) under my guidance and supervision during 2021-2022, in partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

Viva Voice Examination Held on .....18/05/2022.....

DR. SUDHAKAR VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbaroor - 683 542

  
Project Guide

  
Head of the Department

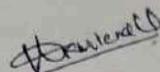
  
External Examiner



## DECLARATION

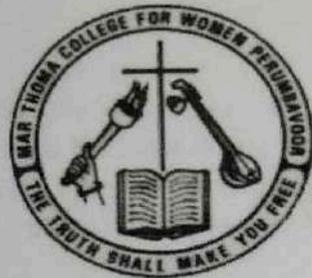
I, AKHILENDU .T.ANIL do hereby declare that this project report entitled "HOME ENERGY AUDIT" is a based on the original work and carried out by me under the Guidance of Dr.Paulose Thomas Department of Physics, Mar Thoma College for Women, Perumbavoor

Date: 18-05-2022  
Place: Perumbavoor

  
AKHILENDU.T.ANIL

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)

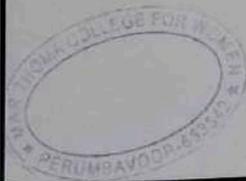


**CERTIFICATE**

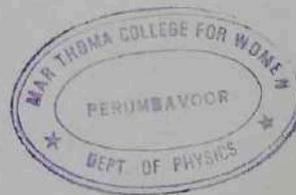
This is to certify that the project report entitled "**Synthesis of Silver Nano Particles Using Coir Fibre Extracts**" is the bonafide work carried out by Ms. Nasooha Jalal under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

Project Guide

Head of the Department



Dr. S. J. MARGHESE  
Principal - in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



## DECLARATION

I, **Nasooha Jalal** do hereby declare that this project report entitled "**Synthesis of Silver Nano Particles Using Coir Fibre Extracts**" is a based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Date: 12/4/2022

Signature:



**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

This is to certify that the project report entitled "ENERGY AUDIT – INSTITUTION 2021-22" is the bonafide work carried out by Ms. FATHIMATH SANIYA(Reg.no:190021041538) under my guidance and supervision Bachelored Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

Viva Voice Examination Held on 18/05/2022

*Rafoni Jacob*

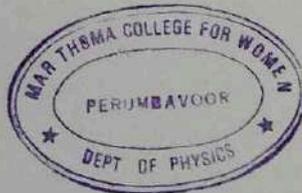
Project Guide

*CD*

Head of the Department

*[Signature]*

External Examiner



*[Signature]*  
DR. SUJO MARY VARGHESE  
Principal-In-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

## DECLARATION

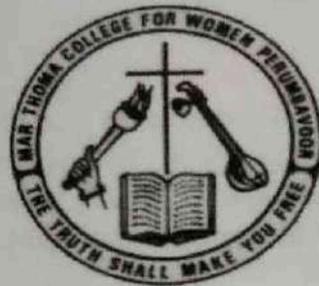
I, FATHIMATH SANIYA do hereby declare that this project report entitled "ENERGY AUDIT – INSTITUTION 2021-22" is based on the original work and carried out by me under the Guidance of Dr., RAJANI JACOB Assistant Professor, Department Of Physics, Mar Thoma College for Women, Perumbavoor.

Date 18/5/22  
Place Nalamile

  
FATHIMATH SANIYA

**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

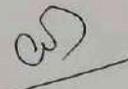
(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)

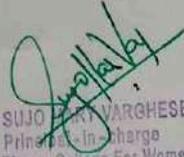


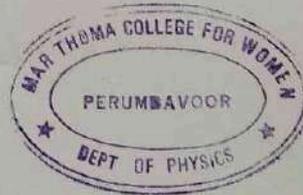
**CERTIFICATE**

This is to certify that the project report entitled "**Wireless EV Charging Station**" is the bonafide work carried out by Ms. Farisha K.M. under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

  
Project Guide

  
Head of the Department

  
DR. SUJITHA VARGHESE  
Principal - in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



## DECLARATION

I, Farisha K. M., do hereby declare that this project report entitled "**Wireless EV Charging Station**" is based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

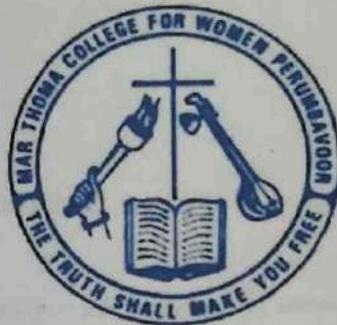
Place: Perumbavoor

Signature:

Date: 12/4/22



**Mar Thoma College for Women Perumbavoor**  
(Affiliated to Mahatma Gandhi University)



**CERTIFICATE**

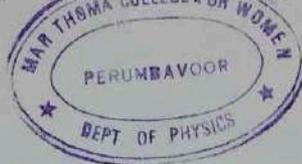
This is to certify that the project report entitled "INDUSTRIAL ENERGY AUDIT" is the bonafide work carried out by Ms. Fathima Shiril (Reg.no:190021041548) under My guidance and supervision during 2021-2022, in partial fulfilment of the Requirement for the award of the Degree of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

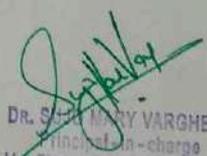
Viva Voice Examination Held on 18/05/2022

  
Project Guide

  
Head of the Department

  
External Examiner



  
DR. S. MARY VARGHESE  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 693 542

### Declaration

I Fathima Shiril hereby declare that this project report entitled "REPORT ON ENERGY AUDIT PROGRAM " has been prepared by us during the year 2022, under the guidance of Dr. Melvi Chandy ,Department Physics, Mar Thoma college for women Perumbavoor.

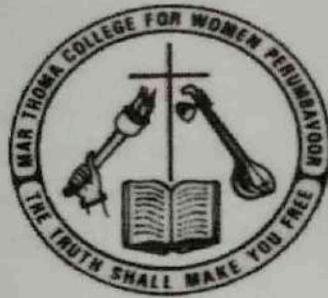
Place : Perumbavoor

Date : 18/05/2022

Fathima Shiril  
Shiril  
18/05/2022

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)

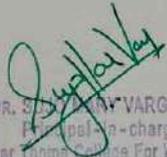


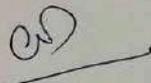
## CERTIFICATE

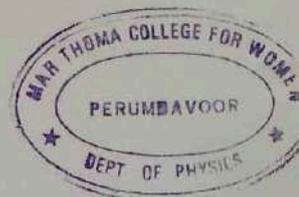
This is to certify that the project report entitled "**Resistivity of a semiconductor using four probe analysis**" is the bonafide work carried out by Ms. Sana Sayed under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

  
Project Guide



  
DR. S. J. VARGHESE  
Principal - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

  
Head of the Department



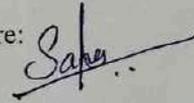
## DECLARATION

I, **Sana Sayed**, do hereby declare that this project report entitled "**Resistivity of a semiconductor using four probe analysis**" is a based on the original work and carried out by me under the Guidance of **Dr. Melvi Chandy**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

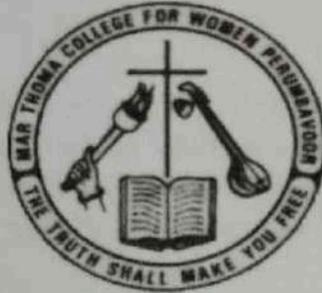
Date: 12/4/2022

Signature:



**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



**CERTIFICATE**

This is to certify that the project report entitled "**CARBON FOOTPRINT ANALYSIS**" is the bonafide work carried out by Ms. Aiswarya Ramesh under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

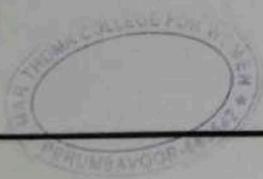
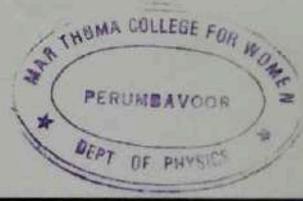


Project Guide



Head of the Department

  
Dr. SUJO MARY VARGHESE  
Principal-In-charge  
Mar Thoma College For Women  
Perumbaroor - 683 542



## DECLARATION

I, **Aiswarya Ramesh** do hereby declare that this project report entitled "**CARBON FOOTPRINT ANALYSIS**" is based on the original work and carried out by me under the Guidance of **Dr. Anupama P.**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Date: 12/4/2022

Signature: 

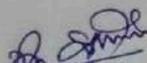
**Mar Thoma College for Women Perumbavoor**  
(Affiliated to Mahatma Gandhi University)



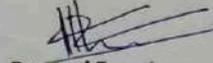
**CERTIFICATE**

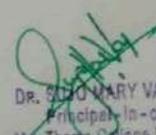
This is to certify that the project report entitled "INDUSTRIAL ENERGY AUDIT" is the bonafide work carried out by Ms. Durga Gopan (Reg.no:190021041546) under My guidance and supervision during 2021-2022, in partial fulfilment of the Requirement for the award of the Degree of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

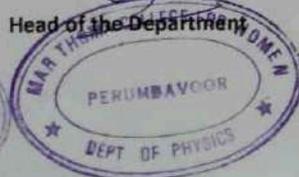
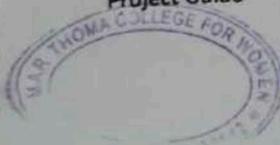
Viva Voice Examination Held on 18/05/2022

  
Project Guide

  
Head of the Department

  
External Examiner

  
DR. SIO MARY VARGHESE  
Principal In-charge  
Mar Thoma College For Women  
Perumbavoor - 683 547



**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



**CERTIFICATE**

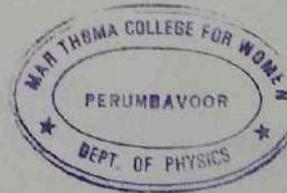
This is to certify that the project report entitled "**Dielectric Constant of a Solid and Liquid**" is the bonafide work carried out by Ms. Najiya A. A. under my guidance and supervision, as part of the curriculum of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

Project Guide

Head of the Department



DR. SUJITHA VARGHESE  
Principal - in-charge  
Mar Thoma College For Women  
Perumbavoor - 688 542



# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University, Kottayam, Kerala)



## CERTIFICATE

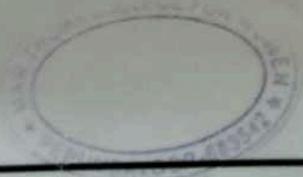
This is to certify that the project report entitled "**Synthesis of Copper Oxide Nano particles**" is the bonafide work carried out by Ms. Anagha P. S. under my guidance and supervision, as part of the curriculum of Integrated Programme in Basic Science Physics under the faculty of Science of Mahatma Gandhi University, Kottayam, Kerala during the academic year 2021-2022.

*Refoni Jacob*

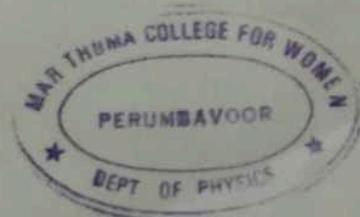
Project Guide

*W*

Head of the Department



*Dr. S. MARY VARGHESE*  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor, 688542



## DECLARATION

I, Anagha P. S., do hereby declare that this project report entitled "**Synthesis of Copper Oxide Nano particles**" is a based on the original work and carried out by me under the Guidance of **Dr. Rajani Jacob**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Date: 12/04/2022

Signature:



## Acknowledgment

I would like to thank my supervisor, Dr. Paulose Thomas, for his guidance and support throughout the project. I would also like to thank my friends and family for their encouragement and support.

I would like to thank my supervisor, Dr. Paulose Thomas, for his guidance and support throughout the project. I would also like to thank my friends and family for their encouragement and support.

## Declaration

I Anna Davis hereby declare that this project report entitled "REPORT ON ENERGY AUDIT PROGRAM" has been prepared by us during the year 2022, under the guidance of Dr. Paulose Thomas, Department Physics, Mar Thoma college for women Perumbavoor.

Place : Perumbavoor

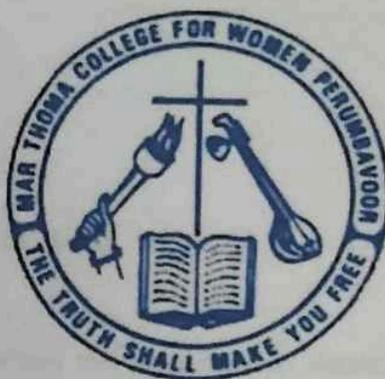
Date : 18/05/2022

Anna Davis



# Mar Thoma College for Women Perumbavoor

(Affiliated to Mahatma Gandhi University)



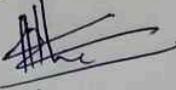
## CERTIFICATE

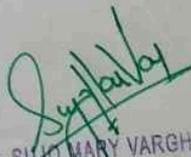
This is to certify that the project report entitled "INDUSTRIAL ENERGY AUDIT" is the bonafide work carried out by Ms. Anna Davis (Reg.no:190021041545) under My guidance and supervision during 2021-2022, in partial fulfilment of the Requirement for the award of the Degree of Bachelor of Science in Physics (Model II Applied Electronics) under the faculty of Science of the Mahatma Gandhi University, Kottayam during the academic session 2021-2022.

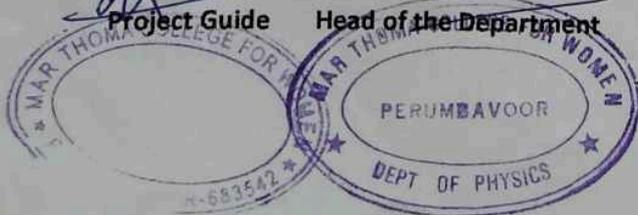
Viva Voice Examination Held on 18/05/2022

  
Project Guide

  
Head of the Department

  
External Examiner

  
DR. SIJO MARY VARGHESE  
Principal-In-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542



## DECLARATION

I, Najiya A. A., do hereby declare that this project report entitled "**Dielectric Constant of a Solid and Liquid**" is based on the original work and carried out by me under the Guidance of **Dr. Paulose Thomas**, Department of Physics, Mar Thoma College for Women, Perumbavoor.

Place: Perumbavoor

Signature:



Date: 12/4/2022

### Declaration

I Durga Gopan hereby declare that this project report entitled "REPORT ON ENERGY AUDIT PROGRAM " has been prepared by us during the year 2022, under the guidance of Dr. Paulose Thomas ,Department Physics, Mar Thoma college for women Perumbavoor.

Place : Perumbavoor

Date : 18/05/2022

Durga Gopan  
Durga Gopan  
18/05/2022

**“A STUDY ON DIGITAL TRANSFORMATION OF  
EDUCATION DURING THE COVID -19 PANDEMIC AND ITS  
PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE  
STUDENTS IN KERALA”**

A dissertation submitted to  
**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**  
In partial fulfilment of the requirement for the award of  
**BACHELOR DEGREE IN COMMERCE**

Submitted By

Ann Mary Thomas [190021068104]

Anu George [190021068105]

Arsha Eldose [190021068107]

Fahima Rafeeqe [190021068109]

Under the guidance of

**Ms. SERENE ANNA SAM**  
Assistant Professor  
Department of Commerce



DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

2019 - 2022



*Sybil Vay*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

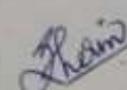
DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



CERTIFICATE

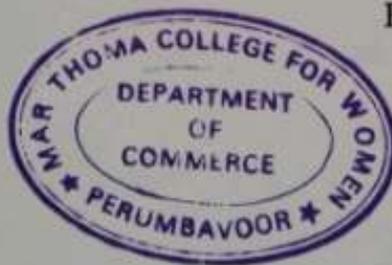
This is to certify that the project entitled "A STUDY ON DIGITAL TRANSFORMATION OF EDUCATION DURING THE COVID -19 PANDEMIC AND ITS PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE STUDENTS IN KERALA" is a record of research work jointly done by Kumari. ANN MARY THOMAS, Kumari. ANU GEORGE, Kumari. ARSHA ELDOSE, Kumari. FAHIMA RAFEEQUE in partial fulfilment of the requirement of the Degree of Bachelor in Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

  
Ms. Serene Anna Sam  
Internal Project Guide

  
Ms Sherin T Abraham  
Head of the Department

External Examiner:

Date:



**“A STUDY ON DIGITAL TRANSFORMATION OF  
EDUCATION DURING THE COVID -19 PANDEMIC AND ITS  
PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE  
STUDENTS IN KERALA”**

A dissertation submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfilment of the requirement for the award of  
**BACHELOR DEGREE IN COMMERCE**

Submitted By

Ann Mary Thomas [190021068104]

Anu George [190021068105]

Arsha Eldose [190021068107]

Fahima Rafeeqe [190021068109]

Under the guidance of

**Ms. SERENE ANNA SAM**

Assistant Professor  
Department of Commerce



DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

2019 – 2022



*Sujeetha V*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 688 642

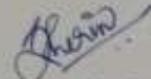
DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



CERTIFICATE

This is to certify that the project entitled "A STUDY ON DIGITAL TRANSFORMATION OF EDUCATION DURING THE COVID -19 PANDEMIC AND ITS PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE STUDENTS IN KERALA" is a record of research work jointly done by Kumari. ANN MARY THOMAS, Kumari. ANU GEORGE, Kumari. ARSHA ELDOSE, Kumari. FAHIMA RAFEEQUE in partial fulfilment of the requirement of the Degree of Bachelor in Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

  
Ms. Serene Anna Sam  
Internal Project Guide

  
Ms Sherin T Abraham  
Head of the Department



External Examiner:  
Date:

**“A STUDY ON DIGITAL TRANSFORMATION OF  
EDUCATION DURING THE COVID -19 PANDEMIC AND ITS  
PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE  
STUDENTS IN KERALA”**

A dissertation submitted to  
**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**  
In partial fulfilment of the requirement for the award of  
**BACHELOR DEGREE IN COMMERCE**

Submitted By

Ann Mary Thomas [190021068104]

Anu George [190021068105]

Arsha Eldose [190021068107]

Fahima Rafeeqe [190021068109]

Under the guidance of

**Ms. SERENE ANNA SAM**  
Assistant Professor  
Department of Commerce



DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR  
2019 – 2022



*Sybil Vay*  
Principal - In - charge  
Mar Thoma College For Women  
Perumbavoor - 683 642

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR

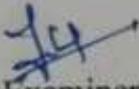


CERTIFICATE

This is to certify that the project entitled "A STUDY ON DIGITAL TRANSFORMATION OF EDUCATION DURING THE COVID -19 PANDEMIC AND ITS PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE STUDENTS IN KERALA" is a record of research work jointly done by Kumari. ANN MARY THOMAS, Kumari. ANU GEORGE, Kumari. ARSHA ELDOSE, Kumari. FAHIMA RAFEEQUE in partial fulfilment of the requirement of the Degree of Bachelor in Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

  
Ms. Serene Anna Sam  
Internal Project Guide

  
Ms Sherin T Abraham  
Head of the Department

  
External Examiner:

Date:



**“A STUDY ON DIGITAL TRANSFORMATION OF  
EDUCATION DURING THE COVID -19 PANDEMIC AND ITS  
PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE  
STUDENTS IN KERALA”**

A dissertation submitted to  
**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**  
In partial fulfilment of the requirement for the award of  
**BACHELOR DEGREE IN COMMERCE**

Submitted By

Ann Mary Thomas [190021068104]  
Anu George [190021068105]  
Arsha Eldose [190021068107]  
Fahima Rafeeque [190021068109]

Under the guidance of

**Ms. SERENE ANNA SAM**  
Assistant Professor  
Department of Commerce



DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR  
2019 – 2022



*Sybil Varghese*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

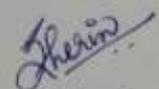
DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



CERTIFICATE

This is to certify that the project entitled "A STUDY ON DIGITAL TRANSFORMATION OF EDUCATION DURING THE COVID -19 PANDEMIC AND ITS PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE STUDENTS IN KERALA" is a record of research work jointly done by Kumari. ANN MARY THOMAS, Kumari. ANU GEORGE, Kumari. ARSHA ELDOSE, Kumari. FAHIMA RAFEEQUE in partial fulfilment of the requirement of the Degree of Bachelor in Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

  
Ms. Serene Anna Sam  
Internal Project Guide

  
Ms Sherin T Abraham  
Head of the Department

External Examiner:  
Date:



**“A STUDY ON DIGITAL TRANSFORMATION OF  
EDUCATION DURING THE COVID -19 PANDEMIC AND ITS  
PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE  
STUDENTS IN KERALA”**

A dissertation submitted to  
**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**  
In partial fulfilment of the requirement for the award of  
**BACHELOR DEGREE IN COMMERCE**

Submitted By

Ann Mary Thomas [190021068104]

Anu George [190021068105]

Arsha Eldose [190021068107]

Fahima Rafeeqe [190021068109]

Under the guidance of

**Ms. SERENE ANNA SAM**  
Assistant Professor  
Department of Commerce



**DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR  
2019 – 2022**



*Suzanne Vay*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 688 542

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



CERTIFICATE

This is to certify that the project entitled "A STUDY ON DIGITAL TRANSFORMATION OF EDUCATION DURING THE COVID -19 PANDEMIC AND ITS PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE STUDENTS IN KERALA" is a record of research work jointly done by Kumari. ANN MARY THOMAS, Kumari. ANU GEORGE, Kumari. ARSHA ELDOSE, Kumari. FAHIMA RAFEEQUE in partial fulfilment of the requirement of the Degree of Bachelor in Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

Ms. Serenie Anna Sam  
Internal Project Guide

Ms Sherin T Abraham  
Head of the Department

External Examiner:

Date:



**“A STUDY ON DIGITAL TRANSFORMATION OF  
EDUCATION DURING THE COVID -19 PANDEMIC AND ITS  
PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE  
STUDENTS IN KERALA”**

A dissertation submitted to  
**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfilment of the requirement for the award of  
**BACHELOR DEGREE IN COMMERCE**

Submitted By

Ann Mary Thomas [190021068104]

Anu George [190021068105]

Arsha Eldose [190021068107]

Fahima Rafeeqe [190021068109]

Under the guidance of

**Ms. SERENE ANNA SAM**

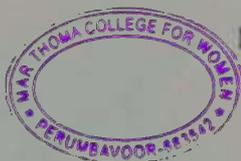
Assistant Professor

Department of Commerce



**DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR**

**2019 – 2022**



*Sybil Vay*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



CERTIFICATE

This is to certify that the project entitled "A STUDY ON DIGITAL TRANSFORMATION OF EDUCATION DURING THE COVID -19 PANDEMIC AND ITS PSYCHOLOGICAL EFFECTS ON UNDERGRADUATE STUDENTS IN KERALA" is a record of research work jointly done by Kumari. ANN MARY THOMAS, Kumari. ANU GEORGE, Kumari. ARSHA ELDOSE, Kumari. FAHIMA RAFEEQUE in partial fulfilment of the requirement of the Degree of Bachelor in Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

  
Ms. Serene Anna Sam  
Internal Project Guide

  
Ms Sherin T Abraham  
Head of the Department

  
External Examiner:  
Date:



**CUSTOMER SATISFACTION TOWARDS KOCHI METRO  
RAIL LIMITED**

**PROJECT REPORT**

Submitted in Mahatma Gandhi University, Kottayam  
In partial fulfillment of the requirement for the award of the degree of  
**BACHELOR OF COMMERCE**

Submitted

By

<b>AKSA MARY THOMAS</b>	<b>190021068102</b>
<b>FATHIMATH SUHARA C. A.</b>	<b>190021068136</b>
<b>KHADEEJA NAHADA M.Z.</b>	<b>190021068138</b>
<b>RAVEENA R.</b>	<b>190021068141</b>

Under the guidance of

**Mr. JIBIN SHIBU SAM**

(Assistant Professor of the Department of Commerce)



**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR  
(2019-2022)**



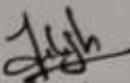
*Sybil Vas*  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 642

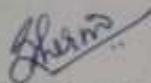
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR  
(2019-2022)



CERTIFICATE

This is to certify that the dissertation entitled "CUSTOMER SATISFACTION TOWARDS KOCHI METRO RAIL LIMITED" is a bonafide record of work done by Miss. Aksa Mary Thomas, Miss. Fathimath Suhara C.A , Miss. Khadeeja Nahada M.Z and Miss. Raveena R. submitted in partial fulfillment of the requirement for the award of degree of bachelor of commerce of Mahatma Gandhi University, Kottayam during the period 2022 under my supervision and guidance. It is further certified that the project is not previously used for the award of any degree diplomas fellowship or awarding other similar title of recognition. The project is worth submitted for the awards of degree of Bachelor of Commerce.

  
Internal project guide

  
Head of the Department

Submitted for the examination held on:.....16-05-2022.....

External Examiner:   
16/5/22



**CUSTOMER SATISFACTION TOWARDS KOCHI METRO  
RAIL LIMITED**

**PROJECT REPORT**

Submitted in Mahatma Gandhi University, Kottayam  
In partial fulfillment of the requirement for the award of the degree of  
**BACHELOR OF COMMERCE**

Submitted

By

**AKSA MARY THOMAS**      190021068102  
**FATHIMATH SUHARA C. A.** 190021068136  
**KHADEEJA NAHADA M.Z.** 190021068138  
**RAVEENA R.**                190021068141

Under the guidance of

**Mr. JIBIN SHIBU SAM**

(Assistant Professor of the Department of Commerce)



**MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR**

(2019-2022)



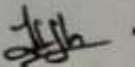
*Jayalaxmi*  
Principal - In-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

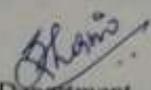
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR  
(2019-2022)



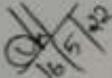
CERTIFICATE

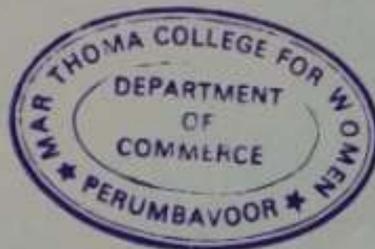
This is to certify that the dissertation entitled "CUSTOMER SATISFACTION TOWARDS KOCHI METRO RAIL LIMITED" is a bonafide record of work done by Miss. Aksa Mary Thomas, Miss. Fathimath Suhara C.A , Miss. Khadeeja Nahada M.Z and Miss. Raveena R. submitted in partial fulfillment of the requirement for the award of degree of bachelor of commerce of Mahatma Gandhi University, Kottayam during the period 2022 under my supervision and guidance. It is further certified that the project is not previously used for the award of any degree diplomas fellowship or awarding other similar title of recognition. The project is worth submitted for the awards of degree of Bachelor of Commerce.

  
Internal project guide

  
Head of the Department

Submitted for the examination held on:.....16-05-2022.....

External Examiner: 



**“A STUDY ON THE EFFECTIVENESS OF SOCIAL MEDIA  
ENTREPRENEURSHIP IN THE CONTEMPORARY WORLD”**

Dissertation Submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirements for the award of Degree of

**BACHELOR OF COMMERCE**

Submitted by

JIXA MATHEW (190021068112)

KRISHNAPRIYA MANOJ (190021068113)

LAKSHMI SAJAN (190021068114)

LIJA JOHNSON (190021068115)

Under the guidance of

**Mrs. DR. AVANI T**

Assistant professor, Department of Commerce



**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

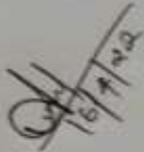
**2019-2022**



*Sybil Vay*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

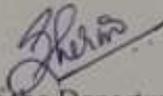
## CERTIFICATE

This is to certify that the project entitled "A STUDY ON THE EFFECTIVENESS OF SOCIAL MEDIA ENTREPRENEURSHIP IN THE CONTEMPORARY WORLD" is a record of research work jointly done by Kumari. JIXA MATHEW, Kumari. KRISHNAPRIYA MANOJ, Kumari. LAKSHMI SAJAN, Kumari. LIJA JOHNSON in partial fulfillment of the requirement for the award of Degree of Bachelor of Commerce under my supervision and guidance.



Internal Project Guide  
Examiner

**Mrs. DR. Avani T**



Head of the Department

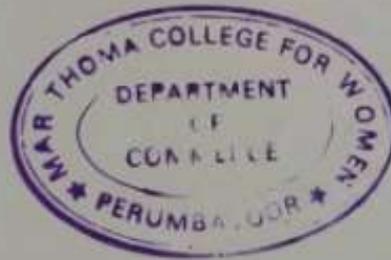
**Mrs. Sherin T. Abraham**



External

Place: Perumbavoor

Date: 16.5.22



**"A STUDY ON THE EFFECTIVENESS OF SOCIAL MEDIA  
ENTREPRENEURSHIP IN THE CONTEMPORARY WORLD"**

Dissertation Submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirements for the award of Degree of

**BACHELOR OF COMMERCE**

Submitted by

JIXA MATHEW (190021068112)

KRISHNAPRIYA MANOJ (190021068113)

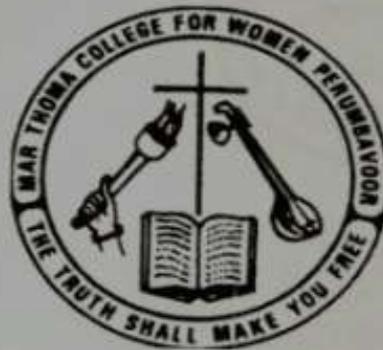
LAKSHMI SAJAN (190021068114)

LIJA JOHNSON (190021068115)

Under the guidance of

**Mrs. DR. AVANI T**

Assistant professor, Department of Commerce



**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019-2022**



*Suzilla Jay*

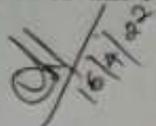
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 642

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON THE EFFECTIVENESS OF SOCIAL MEDIA ENTREPRENEURSHIP IN THE CONTEMPORARY WORLD" is a record of research work jointly done by Kumari. JIXA MATHEW, Kumari. KRISHNAPRIYA MANOJ, Kumari. LAKSHMI SAJAN, Kumari. LIJA JOHNSON in partial fulfillment of the requirement for the award of Degree of Bachelor of Commerce under my supervision and guidance.

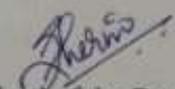
Internal Project Guide  
Examiner

Mrs. DR. Avani T



Place: Perumbavoor

Date: 16-5-22



Head of the Department

Mrs. Sherin T. Abraham



External



**A STUDY ON THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY  
ON THE FINANCIAL PERFORMANCE OF KITEX GARMENTS LIMITED,  
KIZHAKKAMBALAM**

A dissertation submitted to

**MAHATMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfilment of requirements for the award of

**DEGREE OF BACHELOR OF COMMERCE**

Submitted by

**NIVYA RAJAN 190021068120**

**SWALIHA BACKER 190021068126**

**VEENA SURESH 190021068127**

Under the guidance of

**DR. SUJO MARY VARGHESE**

**PRINCIPAL**



**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

**(2019-2022)**



*Suj Mary Varghese*  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

DEPARTMENT OF COMMERCE

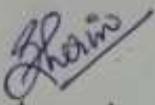
MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

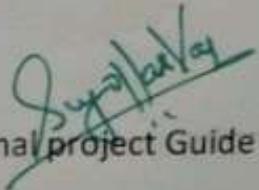
(2019-2022)



CERTIFICATE

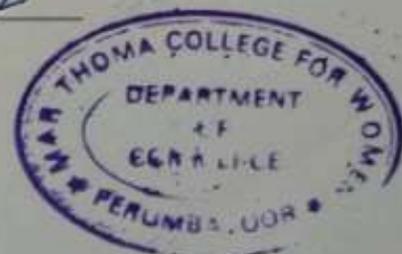
This is to certify that the project entitled "A STUDY ON THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON THE PERFORMANCE OF KITEX GARMENTS LIMITED, KIZHAKKAMBALAM" is a bonafide record of the work done by Nivya Rajan, Swaliha Backer and Veena Suresh is submitted in partial fulfilment of the requirements of Bachelor of Commerce model I CBCSS of Mahatma Gandhi University, Kottayam during the period 2019-2022. It is certified that this project work has not formed part of any other degree/diploma/associateship/fellowship or the similar title by these candidates.

  
Head of the Department

  
Internal Project Guide

Submitted for the Examination held on 16.5.22

  
External Examiner:



**A STUDY ON THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY  
ON THE FINANCIAL PERFORMANCE OF KITEX GARMENTS LIMITED,  
KIZHAKKAMBALAM**

A dissertation submitted to

**MAHATMA GANDHI UNIVERSITY KOTTAYAM**

In partial fulfilment of requirements for the award of

**DEGREE OF BACHELOR OF COMMERCE**

Submitted by

**NIVYA RAJAN 190021068120**

**SWALIHA BACKER 190021068126**

**VEENA SURESH 190021068127**

Under the guidance of

**DR. SUJO MARY VARGHESE**

**PRINCIPAL**



**MAR THOMA COLLEGE FOR WOMEN**

**PERUMBAVOOR**

**(2019-2022)**



*Sujatha Varghese*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

DEPARTMENT OF COMMERCE

MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(2019-2022)



CERTIFICATE

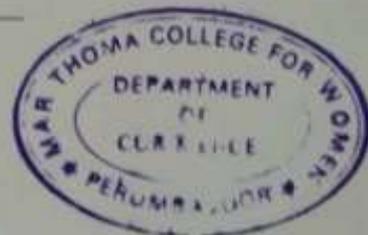
This is to certify that the project entitled "A STUDY ON THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON THE PERFORMANCE OF KITEX GARMENTS LIMITED, KIZHAKKAMBALAM" is a bonafide record of the work done by Nivya Rajan, Swaliha Backer and Veena Suresh is submitted in partial fulfilment of the requirements of Bachelor of Commerce model I CBCSS of Mahatma Gandhi University, Kottayam during the period 2019-2022. It is certified that this project work has not formed part of any other degree/diploma/associateship/fellowship or the similar title by these candidates.

Head of the Department

Internal project Guide

Submitted for the Examination held on \_\_\_\_\_

External Examiner:



A STUDY ON THE FINANCIAL PERFORMANCE  
OF M/S AMAL PLYWOOD, NELLIMOLAM,  
PULLUVAZHY, PERUMBAVOOR

A dissertation submitted to

MAHATMA GANDHI UNIVERSITY KOTTAYAM

in partial fulfilment of requirements for the award of

BACHELOR DEGREE IN COMMERCE

Submitted by

Shilpa Sunny P

Shruthy Hariharan

Sneha Alice Jiju

190021068122

190021068123

190021068124

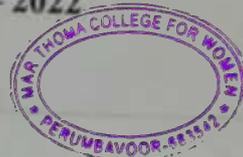
Under the guidance of

Dr. Sujo Mary Varghese



DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

2019 - 2022



*Sujoya Varghese*  
Principal - in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 642

DEPARTMENT OF COMMERCE

MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR



CERTIFICATE

This is to certify that the project entitled "A STUDY ON THE FINANCIAL PERFORMANCE OF M/S AMAL PLYWOOD NELLIMOLAM, PULLUVAZHY, PERUMBAVOOR" is a record of research work jointly done by Kumari. SHILPA SUNNY P, Kumari. SHRUTHY HARIHARAN, Kumari. SNEHA ALICE JIJU in partial fulfilment of the requirement of the Degree of Bachelor of Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

Dr. Sujo Mary Varghese

Ms Sherin T Abraham

Internal Project Guide

Head of the Department

External Examiner:

Date: 16-05-2022



A STUDY ON THE FINANCIAL PERFORMANCE  
OF M/S AMAL PLYWOOD, NELLIMOLAM,  
PULLUVAZHY, PERUMBAVOOR

A dissertation submitted to  
MAHATMA GANDHI UNIVERSITY KOTTAYAM  
in partial fulfilment of requirements for the award of  
BACHELOR DEGREE IN COMMERCE

Submitted by

Shilpa Sunny P  
190021068122

Shruthy Hariharan  
190021068123

Sneha Alice Jiju  
190021068124

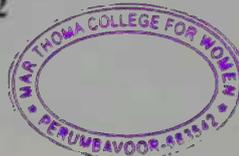
Under the guidance of

Dr. Sujo Mary Varghese



DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN,  
PERUMBAVOOR

2019 - 2022



*Sujoya Varghese*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 685 542

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR



CERTIFICATE

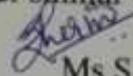
This is to certify that the project entitled "A STUDY ON THE FINANCIAL PERFORMANCE OF M/S AMAL PLYWOOD NELLIMOLAM, PULLUVAZHY, PERUMBAVOOR" is a record of research work jointly done by Kumari. SHILPA SUNNY P, Kumari. SHRUTHY HARIHARAN, Kumari. SNEHA ALICE JIJU in partial fulfilment of the requirement of the Degree of Bachelor of Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

Dr. Sujo Mary Varghese

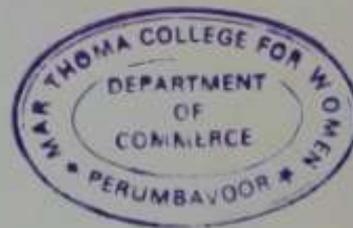
Internal Project Guide

External Examiner:

Date: 16.05.2022.

  
Ms Sherin T Abraham

Head of the Department



**“AN ANALYSIS OF BANK EMPLOYEES OCCUPATIONAL  
STRESS WITH REFERENCE TO ERNAKULAM  
DISTRICT”**

A dissertation submitted to

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfilment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**MALAVIKA S KARTHA (190021068116)**

**MERLIN P S ( 190021068117)**

**MUHZINA YOOSEPH (190021068118)**

**NATHASHA C S (190021068119)**

Under the guidance of

**Dr.AVANI . T**



*Sybil Varghese*

Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

**DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

2019 - 2022

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



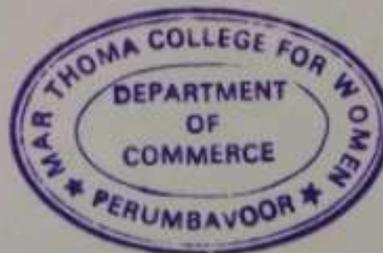
CERTIFICATE

This is to certify that the project entitled "AN ANALYSIS OF BANK EMPLOYEES OCCUPATIONAL STRESS WITH REFERENCE TO ERNAKULAM DISTRICT" is a record of research work jointly done by **Kumari. MALAVIKA S KARTHA, Kumari. MERLIN P S, Kumari. MUHZINA YOOSEPH, Kumari. NATHASHA C S** in partial fulfilment of the requirement of the Degree of Bachelor of Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

Internal Project Guide

Head of the Department

External Examiner



Date 16-05-22

**“AN ANALYSIS OF BANK EMPLOYEES OCCUPATIONAL  
STRESS WITH REFERENCE TO ERNAKULAM  
DISTRICT”**

A dissertation submitted to

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfilment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**MALAVIKA S KARTHA (190021068116)**

**MERLIN P S (190021068117)**

**MUHZINA YOOSEPH (190021068118)**

**NATHASHA C S (190021068119)**

Under the guidance of

**Dr.AVANI . T**



*Sys/ka/Vay*

Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

2019 - 2022



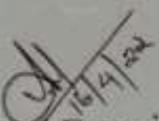
DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



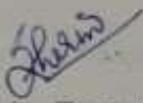
CERTIFICATE

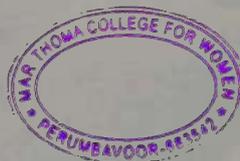
This is to certify that the project entitled "AN ANALYSIS OF BANK EMPLOYEES OCCUPATIONAL STRESS WITH REFERENCE TO ERNAKULAM DISTRICT" is a record of research work jointly done by Kumari. MALAVIKA S KARTHA, Kumari. MERLIN P S, Kumari. MUHZINA YOOSEPH, Kumari. NATHASHA C S in partial fulfilment of the requirement of the Degree of Bachelor of Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

  
Internal Project Guide

  
External Examiner

Date

  
Head of the Department



  
Principal-in-charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

**A STUDY ON IMPACT OF COVID 19 ON EDUCATIONAL SECTOR  
PARTICULARLY IN COLLEGES OF PERUMBAVOOR REGION**

Project report submitted to

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirements for the award of the degree of

**Bachelor of Commerce**

Submitted by

**ALEENA JOSE(190021068103)**

**NIKINA SAJI (190021068140)**

**MERIN SHAJI(190021068139)**

**GEETHU P M(190021068137)**

Under the guidance of

**MR JIBIN SHIBU SAM**

Assistant professor, Department of Commerce



**DEPARTMENT OF COMMERCE**

**MARTHOMA COLLEGE FOR WOMEN PERUMBAVOOR**

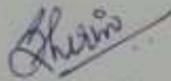
**2019-2022**



*S. J. V. V.*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

## CERTIFICATE

This is to certify that the project entitled " A STUDY ON IMPACT OF COVID 19 ON EDUCATIONAL SECTOR PARTICULARLY IN COLLEGES OF PERUMBAVOOR REGION " by Miss, ALEENA JOSE, NIKINA SAJI, MERIN SHAJI, GEETHU P M is a bonafide record of work done under my guidance and supervision in partial fulfillment of the requirement for the award of the degree of Bachelor of Commerce.



MRS .SHERIN T ABRAHAM  
(HEAD OF THE DEPARTMENT)



MR JIBIN SHIBU SAM  
(PROJECT GUIDE)



External Examiner

Place : Perumbavoor

Date : 16/5/22



**A STUDY ON IMPACT OF COVID 19 ON EDUCATIONAL SECTOR  
PARTICULARLY IN COLLEGES OF PERUMBAVOOR REGION**

Project report submitted to

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirements for the award of the degree of

**Bachelor of Commerce**

Submitted by

**ALEENA JOSE(190021068103)**

**NIKINA SAJI (190021068140)**

**MERIN SHAJI(190021068139)**

**GEETHU P M(190021068137)**

Under the guidance of

**MR JIBIN SHIBU SAM**

Assistant professor, Department of Commerce



**DEPARTMENT OF COMMERCE  
MARTHOMA COLLEGE FOR WOMEN PERUMBAVOOR**

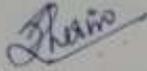
2019-2022



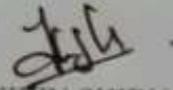
*Sybil Varghese*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 685542

### CERTIFICATE

This is to certify that the project entitled " A STUDY ON IMPACT OF COVID 19 ON EDUCATIONAL SECTOR PARTICULARLY IN COLLEGES OF PERUMBAVOOR REGION " by Miss. ALEENA JOSE, NIKINA SAJI, MERIN SHAJI, GEETHU P M is a bonafide record of work done under my guidance and supervision in partial fulfillment of the requirement for the award of the degree of Bachelor of Commerce.



MRS. SHERIN T ABRAHAM  
(HEAD OF THE DEPARTMENT)



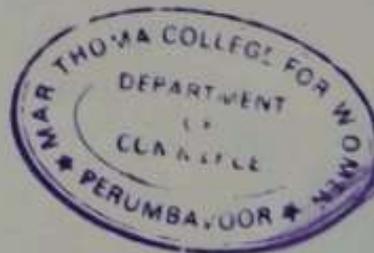
MR JIBIN SHIBU SAM  
(PROJECT GUIDE)



External Examiner

Place : Perumbavoor

Date : 16/5/22



**“A STUDY ON ‘GLASS CEILING EFFECT ON WOMEN’ WHILE  
DEPLOYING MANAGERIAL ROLES IN IT SECTOR OF  
ERNAKULAM REGION”**

A dissertation submitted to

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**ANITHA BENNY (190021068128)**

**ASNA A.A (190021068130)**

**CHANDINI MALAVIKA (190021068133)**

**ELIZABETH CHACKO (190021068135)**

Under the guidance of

**Mrs. SHERIN T ABHRAHAM**



*Sherin T. Abraham*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019 - 2022**

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



CERTIFICATE

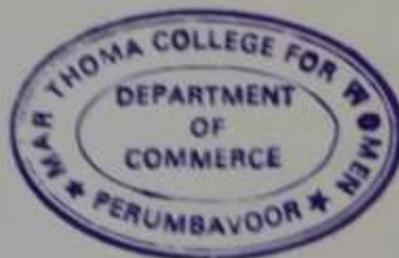
This is to certify that the project entitled "A STUDY ON 'GLASS CEILING EFFECT ON WOMEN' WHILE DEPLOYING MANAGERIAL ROLES IN IT SECTOR OF ERNAKULAM REGION" is a record of research work jointly done by Kumari. ANITHA BENNY, Kumari. ASNA A.A, Kumari. CHANDINI MALAVIKA, Kumari. ELIZABETH CHACKO in partial fulfillment of the requirement of the Degree of Bachelor of Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

Internal Project Guide

External Examiner

Date:

Head of the Department



**“A STUDY ON ‘GLASS CEILING EFFECT ON WOMEN’ WHILE  
DEPLOYING MANAGERIAL ROLES IN IT SECTOR OF  
ERNAKULAM REGION”**

A dissertation submitted to

**MAHATHMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**ANITHA BENNY (190021068128)**

**ASNA A.A (190021068130)**

**CHANDINI MALAVIKA (190021068133)**

**ELIZABETH CHACKO (190021068135)**

Under the guidance of

**Mrs. SHERIN T ABHRAHAM**



*Sherin T Abraham*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019 - 2022**

DEPARTMENT OF COMMERCE  
MAR THOMA COLLEGE FOR WOMEN  
PERUMBAVOOR



CERTIFICATE

This is to certify that the project entitled "A STUDY ON 'GLASS CEILING EFFECT ON WOMEN' WHILE DEPLOYING MANAGERIAL ROLES IN IT SECTOR OF ERNAKULAM REGION" is a record of research work jointly done by Kumari. ANITHA BENNY, Kumari. ASNA A.A, Kumari. CHANDINI MALAVIKA, Kumari. ELIZABETH CHACKO in partial fulfillment of the requirement of the Degree of Bachelor of Commerce under my supervision and guidance and it is further certified that the project work is not previously used for the award of any other degree, diploma and fellowship or for awarding other similar title of recognition.

Internal Project Guide

External Examiner

Date: 16/5/22



Head of the Department

# A STUDY ON IMPACT OF ONLINE FOOD DELIVERY APPLICATIONS DURING COVID PANDEMIC

A Dissertation submitted to  
MAHATMA GANDHI UNIVERSITY

In partial fulfillment of the requirements for the award of the  
**Degree in bachelor of commerce**

**Submitted by**

APARNA A. S	190021068129
ATHIRA REVI	190021068131
BHADRA K.K	190021068132
DEVA RANJINI K	190021068134

Under the Guidance of  
Mrs. SHERIN T ABRAHAM



**MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR**  
**(2019-2022)**



*S. J. V. V.*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 688 542

# MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR



## CERTIFICATE

This is to certify that the project "a study on impact of online food delivery applications during covid pandemic" is a bonafide record of research work done by Miss. Aparna A. S (190021068129), Miss. Athira Revi (190021068131), Miss. Bhadra K.K (190021068132), Miss Deva Ranjini K (190021068134) submitted in partial fulfillment of the requirement of Bachelor of Commerce Model 1 CBCSS of Mahatma Gandhi University, Kottayam during the period 2019-2022 . Also certified that this project work has no formed part of any Degree/ Diploma Association/Fellowship or similar title by these candidates.

Internal project guide:

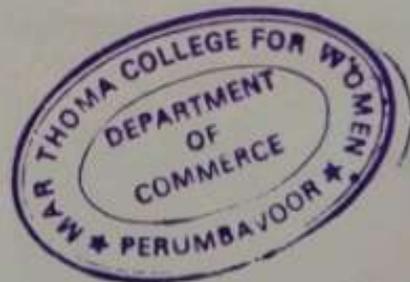
*Aparna A. S*

Head of department:

*Aparna A. S*

External examiner

*[Signature]*  
16/5/22



# A STUDY ON IMPACT OF ONLINE FOOD DELIVERY APPLICATIONS DURING COVID PANDEMIC

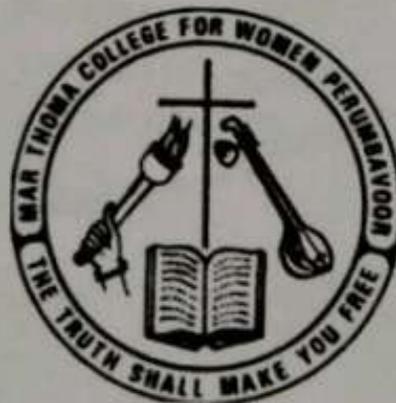
A Dissertation submitted to  
MAHATMA GANDHI UNIVERSITY

In partial fulfillment of the requirements for the award of the  
Degree in bachelor of commerce

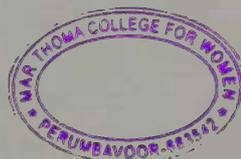
Submitted by

APARNA A. S	190021068129
ATHIRA REVI	190021068131
BHADRA K.K.	190021068132
DEVA RANJINI K	190021068134

Under the Guidance of  
Mrs. SHERIN T ABRAHAM

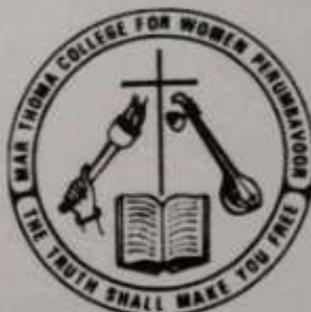


MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR  
(2019-2022)



*Sybil Varghese*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR



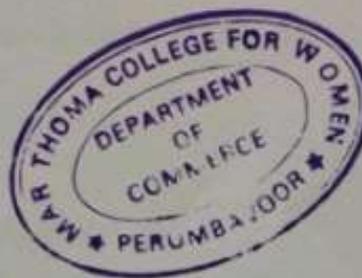
CERTIFICATE

This is to certify that the project "a study on impact of online food delivery applications during covid pandemic" is a bonafide record of research work done by Miss. Aparna A. S (190021068129), Miss. Athira Revi (190021068131), Miss. Bhadra K.K (190021068132), Miss Deva Ranjini K (190021068134) submitted in partial fulfillment of the requirement of Bachelor of Commerce Model 1 CBCSS of Mahatma Gandhi University, Kottayam during the period 2019-2022 . Also certified that this project work has no formed part of any Degree/ Diploma Association/Fellowship or similar title by these candidates.

Internal project guide:

Head of department:

External examiner



**"A STUDY ON THE  
ATTITUDE OF PEOPLE TOWARDS GREEN PRODUCTS "**

A dissertation submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**ARATHI SAJI (190021068106)**

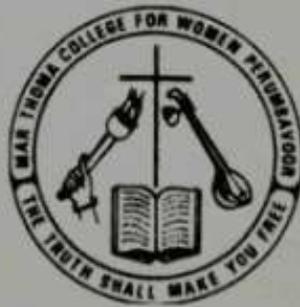
**ASWATHY SREEKUMAR(190021068108)**

**FATHIMA NAZRIN C I (190021068110)**

**GOPIKA REGIKUMAR(190021068111)**

Under the guidance of

**Mrs. SERENE ANNA SAM**



*Sybil Varghese*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 542

**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019-2022**

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON THE ATTITUDE OF PEOPLE TOWARDS GREEN PRODUCTS" is a record of research work jointly done by Kumari. ARATHI SAJI, Kumari. ASWATHY SREEKUMAR, Kumari. FATHIMA NAZRIN C I, Kumari. GOPIKA REGIKUMAR in partial fulfillment of the requirement of the Degree of Bachelor of Commerce.

MRS. SHERIN T ABRAHAM  
(Head of the Department)

MRS. SERENE ANNA SAM  
(Project Guide)

External Examiner

Place : Perumbavoor

Date:



**"A STUDY ON THE  
ATTITUDE OF PEOPLE TOWARDS GREEN PRODUCTS "**

A dissertation submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**ARATHI SAJI (190021068106)**

**ASWATHY SREEKUMAR(190021068108)**

**FATHIMA NAZRIN C I (190021068110)**

**GOPIKA REGIKUMAR(190021068111)**

Under the guidance of

**Mrs. SERENE ANNA SAM**



*Sybilca Vay*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 683 642

**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

**2019-2022**

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON THE ATTITUDE OF PEOPLE TOWARDS GREEN PRODUCTS" is a record of research work jointly done by Kumari. ARATHI SAJI, Kumari. ASWATHY SREEKUMAR, Kumari. FATHIMA NAZRIN C I, Kumari. GOPIKA REGIKUMAR in partial fulfillment of the requirement of the Degree of Bachelor of Commerce.

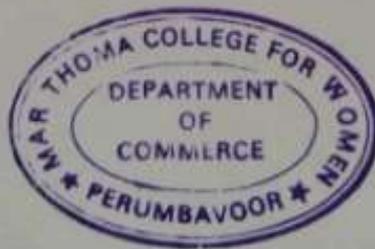
  
MRS. SHERIN T ABRAHAM  
(Head of the Department)

  
MRS. SERENE ANNA SAM  
(Project Guide)

External Examiner

Place : Perumbavoor

Date:



**"A STUDY ON THE  
ATTITUDE OF PEOPLE TOWARDS GREEN PRODUCTS "**

A dissertation submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**ARATHI SAJI (190021068106)**

**ASWATHY SREEKUMAR(190021068108)**

**FATHIMA NAZRIN C I (190021068110)**

**GOPIKA REGIKUMAR(190021068111)**

Under the guidance of

**Mrs. SERENE ANNA SAM**



*Sybil Varghese*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 689 542

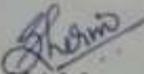
**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

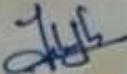
**2019-2022**

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON THE ATTITUDE OF PEOPLE TOWARDS GREEN PRODUCTS" is a record of research work jointly done by Kumari. ARATHI SAJI, Kumari. ASWATHY SREEKUMAR, Kumari. FATHIMA NAZRIN C I, Kumari. GOPIKA REGIKUMAR in partial fulfillment of the requirement of the Degree of Bachelor of Commerce.

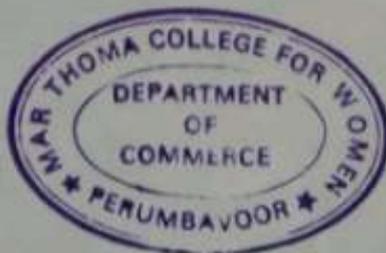
  
MRS. SHERIN T ABRAHAM  
(Head of the Department)

  
MRS. SERENE ANNA SAM  
(Project Guide)

  
External Examiner

Place : Perumbavoor

Date:



**"A STUDY ON THE  
ATTITUDE OF PEOPLE TOWARDS GREEN PRODUCTS "**

A dissertation submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the requirement for the award of

**BACHELOR OF COMMERCE**

Submitted by

**ARATHI SAJI (190021068106)**

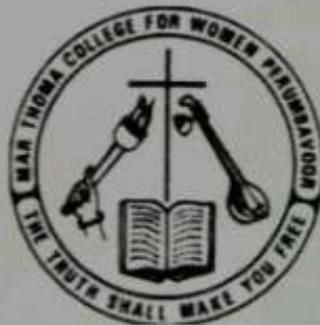
**ASWATHY SREEKUMAR(190021068108)**

**FATHIMA NAZRIN C I (190021068110)**

**GOPIKA REGIKUMAR(190021068111)**

Under the guidance of

**Mrs. SERENE ANNA SAM**



*Serene Anna Sam*  
Principal - in - charge  
Mar Thoma College For Women  
Perumbavoor - 689 542

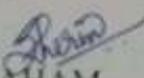
**DEPARTMENT OF COMMERCE**

**MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR**

2019-2022

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON THE ATTITUDE OF PEOPLE TOWARDS GREEN PRODUCTS" is a record of research work jointly done by Kumari. ARATHI SAJI, Kumari. ASWATHY SREEKUMAR, Kumari. FATHIMA NAZRIN C I, Kumari. GOPIKA REGIKUMAR in partial fulfillment of the requirement of the Degree of Bachelor of Commerce.

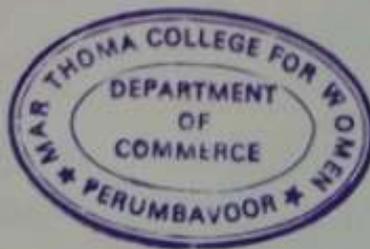
  
MRS. SHERIN T ABRAHAM  
(Head of the Department)

  
MRS. SERENE ANNA SAM  
(Project Guide)

External Examiner

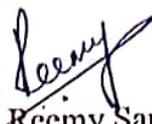
Place : Perumbavoor

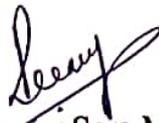
Date:



## CERTIFICATE

This is to certify that the dissertation entitled “EFFECT OF OBESITY IN DAILY LIFE” is an authentic record of the project work done by Miss Maneesha Beegum P M (180021044438) under the supervision and guidance of Mrs. Reemy Sara Mathai in partial fulfilment of the requirement of the degree of Bachelor of science in Zoology and then report has not formed on the basis for the award of any degree or diploma earlier.

  
Mrs. Reemy Sara Mathai  
Supervising Teacher  
Department of Zoology

  
Mrs. Reemy Sara Mathai

Department of Zoology

Head of The Department

Place: Perumbavoor

Date: 16/5/22.

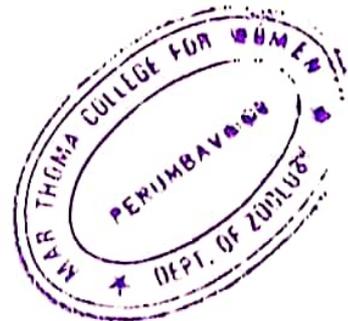
Examiner: 1

Valued and verified.

Examiner: 2

  
16/5/22

2



# CERTIFICATE

This is to certify that the dissertation entitled " A STUDY ON THE IMPORTANCE OF DIAGNOSIS IN JOINT DISORDERS " is an authentic record of the project work done by Miss MAYOORI M B under my supervision and guidance in partial fulfillment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed on the basis of any award of degree or diploma earlier.



Mrs Reemy Sara Mathai

Supervising teacher

Head of department of Zoology

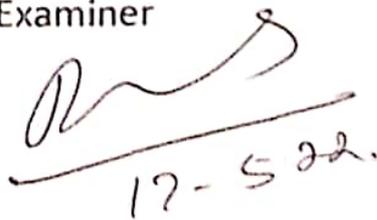
Mar Thoma college for women

Perumbavoor

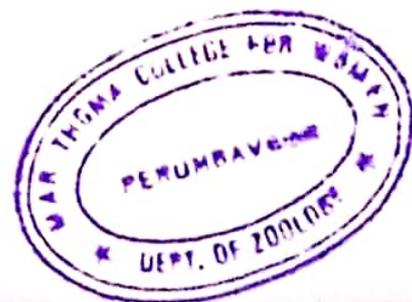
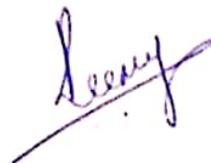
Place: Perumbavoor

Date: 17-5-22

Signature of the Examiner



17-5-22.



# CERTIFICATE

This is to certify that the dissertation entitled "STUDY OF SPIDER DIVERSITY IN WARD 10 OF ASAMANNOOR GRAMAPANCHAYAT" is an authentic record of the project work done by Miss Fathima Kareem under my supervision and guidance in partial fulfillment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed on the basis of any award of degree or diploma earlier.



Mrs Reemy Sara Mathai

Supervising teacher

Head of department of Zoology

Mar Thoma college for women

Perumbavoor

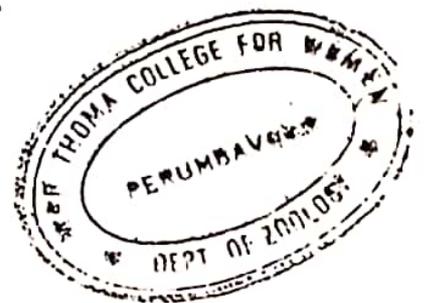
Place: Perumbavoor.

Date: 12/5/22 .

Signature of the examiner: 1.

Verified & valued .

2.



## CERTIFICATE

This is to certify that the dissertation entitled "A STUDY ON THE POULTRY FARM IN KURUPPUMPADY PANCHAYAT IN PERUMBAVOOR" is an authentic record of the project work done by Ms Amalendu Rajan under my supervision and guidance in partial fulfilment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed on the basis for the award of any degree or diploma earlier.

Dr Biju Jacob Tomas

  
17-5-22

Supervising Teacher

Department of Zoology

Mar Thoma College for Women, Perumbavoor

Signature of Examiners

1.

  
17-5-22

2.



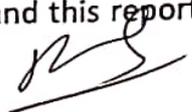
Place: Perumbavoor

Date:



# CERTIFICATE

This is to certify that the dissertation entitled "*A STUDY ON THE EFFECT OF DIFFERENT COLOURED LIGHT ON RED CORAL PLATY FISH*" is an authentic record of the project work done by Miss Fathima Farzana and Ashlin Sabu under my supervision and guidance in partial fulfillment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed on the basis of any award of degree or diploma earlier



Dr. Biju Jacob Thomas  
Supervising Teacher  
Department of Zoology  
Mathoma College for Women



Mrs. Reemy Sara Mathai  
Head of the Department  
Department of Zoology  
Marthoma College for Women

Volined   
17-5-22



Signature of Examiner



## CERTIFICATE

This is to certify that the dissertation "STUDY ON BUTTERFLIES AND THEIR INTERACTION WITH PLANTS IN WARD XII OF KOTTAPPADY PANCHAYATH" is an authentic record of the project work done by Kumari. Hindbeevi A. M under my supervision and guidance in Zoology and the report has not been the basis for the award of any degree or diploma earlier



Mrs. Reemy Sara Mathai

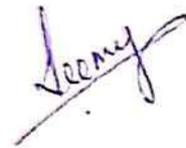
Supervising tr and HOD

Dept. of Zoology

Place: Perumbavoor

Date: 15/5/21

Signature of the examiner

  
15/5/21

# CERTIFICATE

This is to certify that the dissertation entitled "**A STUDY ON THE EFFECT OF DIFFERENT COLOURED LIGHT ON RED CORAL PLATY FISH**" is an authentic record of the project work done by Miss Ashlin Sabu and Fathima Farzana under my supervision and guidance in partial fulfillment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed on the basis of any award of degree or diploma earlier.

  
17-5-22

Dr. Biju Jacob Thomas

Supervising Teacher

Department of Zoology

Mar Thoma College for Women



Mrs. Reemy Sara Mathai  
Head of the Department  
Department of Zoology  
Mar Thoma College for Women

Signature of Examiner:

  
17-5-22



# CERTIFICATE

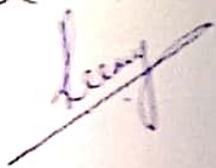
This is to certify that the project work entitled "A COMPARATIVE STUDY ON THE DISTRIBUTION AND DIVERSITY OF ANTS IN DIFFERENT HABITATS OF PERUMBAVOOR MUNICIPALITY" an authentic record of project work done by Miss. ALFIYA SHAJI under my supervision and guidance in partial fulfilment of required of the Degree of Bachelor of science in zoology and this report has not formed the basis of any award of any degree or diploma earlier.

  
17-5-22

Dr. Biju Jacob Thomas  
Supervising Teacher  
Department of Zoology  
Mar Thoma College for Women

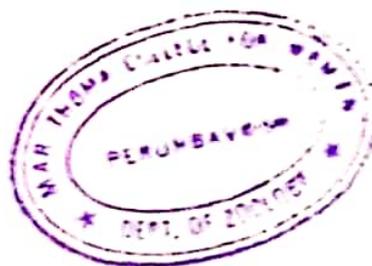
  
Reemy Sara Mathai  
Head of the Department  
Department of Zoology  
Mar Thoma College for Women

*Valued*  
  
17-5-22

Signature of Examiner 

Place : Perumbavoor

Date : 17/5/22



## CERTIFICATE

This is to certify that the dissertation entitled "**A STUDY ON THE POULTRY FARM IN KURUPPUMPADY PANCHAYAT IN PERUMBAVOOR**" is an authentic record of the project work done by Ms Aleena Mariyam George under my supervision and guidance in partial fulfilment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed on the basis for the award of any degree or diploma earlier.

Dr Biju Jacob Tomas

*[Signature]*  
17-5-22

Supervising Teacher

Department of Zoology

Mar Thoma College for Women, Perumbavoor

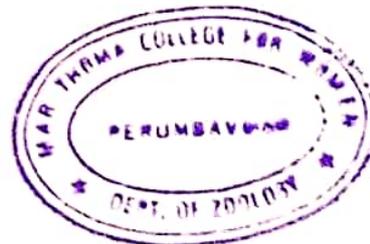
Signature of Examiners

- 1.
- 2.

Valued *[Signature]*  
17-5-22  
*[Signature]*

Place: Perumbavoor

Date:



# CERTIFICATE

This is to certify that this project work "A study on the bird diversity in 7<sup>th</sup> ward, keezhmad panchayath" is a bonafide record of the work carried out by Ms. Nabeela A.A under my guidance and supervision.



Guide: Mrs.Reemy Sara Mathai

Assistant Professor

Department of Zoology

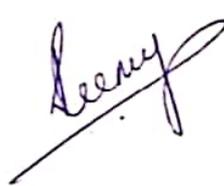
Place: Perumbavoor

Date: 17-5-22

Signature of Examiners

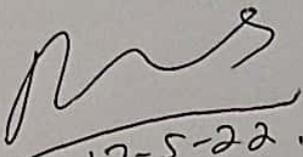
1.

2.

valued   
17-5-22  


## CERTIFICATE

This is to certify that the dissertation "A STUDY ON THE SURVEY OF JOINT DISORDERS WITH SPECIAL RELEVANCE TO RHEUMATOID ARTHRITIS" is an authentic record of the project work done by Dr. Biju Jacob Thomas under my supervision and guidance in partial fulfilment of the requirement of the Degree of Bachelor of Science in Zoology and then report has not formed the basis for award of any degree or diploma earlier.

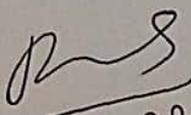
  
17-5-22.

Dr. Biju Jacob Thomas  
Supervising Teacher  
Dept. Of Zoology

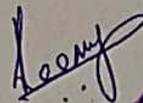
Place: Perumbavoor

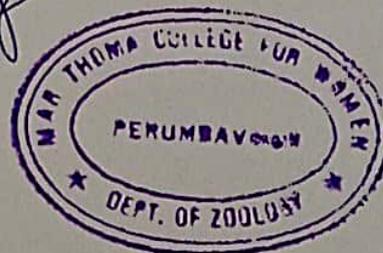
Date: 17-5-22

*valued*

  
17-5-22

Signature of the Examiner





# CERTIFICATE

This is to certify that the dissertation entitled " A CASE STUDY ON MITOCHONDRIAL NEUROGASTROINTESTINAL ENCEPHALOMYOPATHY " is an authentic record of the project work done by Miss Shabana Kareem under my supervision and guidance in partial fulfillment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed on the basis of any award of degree or diploma earlier.



Mrs Reemy Sara Mathai

Supervising teacher

Head of department of Zoology

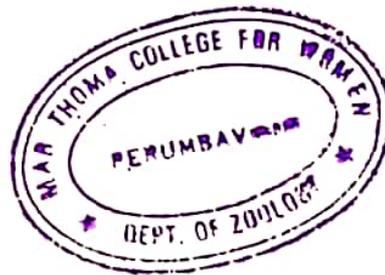
Mar Thoma college for women

Perumbavoor

Place: Perumbavoor.

Date: 12/5/22 .

Signature of the Candidate



Examiners: Verified and  
Valued 

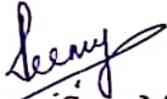


# CERTIFICATE

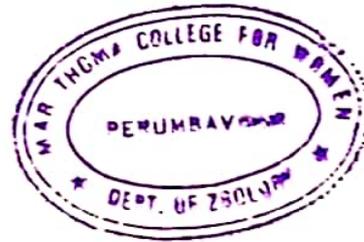
This is to certify that the project work entitled "A COMPARATIVE STUDY ON THE DISTRIBUTION AND DIVERSITY OF ANTS IN DIFFERENT HABITATS OF PERUMBAVOOR MUNICIPALITY" an authentic record of project work done by Miss. FATHIMA SHAJI under my supervision and guidance in partial fulfilment of required of the Degree of Bachelor of science in zoology and this report has not formed the basis of any award of any degree or diploma earlier.



Dr. Biju Jacob Thomas  
Supervising Teacher  
Department of Zoology  
Mar Thoma College for Women

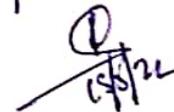


Reemy Sara Mathai  
Head of the Department  
Department of Zoology  
Mar Thoma College for Women



Signature of Examiner

Valued & verified.



Place : Perumbavoor

Date : 18/5/22.

## CERTIFICATE

This is to certify that the project " THE STUDY ON DRAGONFLY DIVERSITY IN WARD 14 OF KOOVAPPADY PANCHAYATH" is an authentic record of the project work done by Miss Sandra P.S. under my supervision and guidance in partial fulfillment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed the basis of any award of any degree or diploma earlier.

  
Mrs. Reemý Sara Mathai  
Supervising teacher  
Head of the Department  
Department of Zoology  
Mar Thoma College for Women

Place: Perumbavoor

Date: 18/5/22

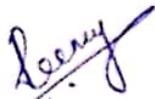
Signature of the Examiner: 





## CERTIFICATE

This is to certify that the dissertation entitled "A STUDY ON THE DIVERSITY OF MILLIPEDE IN PEECHANICKAD, WARD XXX OF ANGAMALY MUNICIPALITY" is an authentic record of the project work done by Ms Siya Paul under my supervision and guidance in partial fulfilment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed on the basis for the award of any degree or diploma earlier.



Mrs. Reemy Sara Mathai

Supervising Teacher

Department of Zoology

Mar Thoma College for Women, Perumbavoor

Signature of Examiners

1. 
2. 



## CERTIFICATE

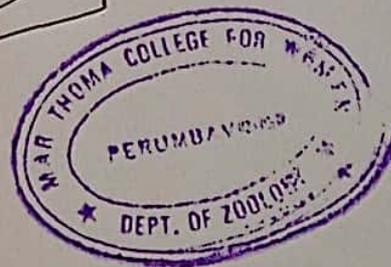
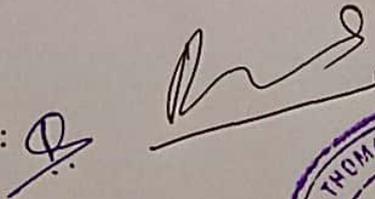
This is to certify that the project " THE STUDY ON PIG FARM MANAGEMENT AND ECONOMIC IMPORTANCE IN CHOORAMUDI,MEEMBARA" is an authentic record of the project work done by Miss Anjana Sajeev. under my supervision and guidance in partial fulfilment of the requirement of the Degree of Bachelor of Science in Zoology and this report has not formed the basis of any award of any degree or diploma earlier.

Dr.Biju Jacob Thomas  
Supervising teacher  
Department of Zoology  
Mar Thoma College for Women

Place: Perumbavoor

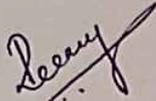
Date: 18/5/22.

Signature of the Examiner:



## CERTIFICATE

This is to certify that the desertion A STUDY ON DAIRY FARM MANAGEMENT AND ECONOMIC IMPORTANCE OF A FARM IN RAYAMANGALAM PANCHAYATH is an authentic record of the project work done by Ms. NIDHY ANNA SUNNY in partial fulfilment of the requirement of the degree of bachelor of science in zoology and this report has to be formed on the basis of any award of degree earlier.



Ms. Reemy Sara Mathai

Head Of The Department Of Zoology

Marthoma College for Women

Date: 18/5/22 -

Place : perumbavoor

Signature of the Examiner

