

**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  
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(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

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External

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# **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

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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*  
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**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**

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**(2020-2022)**

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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

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**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**

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**REG. NO. 200011014844**



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**MAR THOMA COLLEGE FOR WOMEN**

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**(Affiliated to Mahatma Gandhi University)**

**(2020-2022)**

MAR THOMA COLLEGE FOR WOMEN  
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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

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# **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

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Project guide

*Shalika*  
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**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

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*(Affiliated to Mahatma Gandhi University)*

2020-2022

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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 .....

*Shinyjyoti*

Project Guide

*Shalitha*

Head of the Department

*Shanais*

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**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  
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(Affiliated to Mahatma Gandhi University)

2020-2022

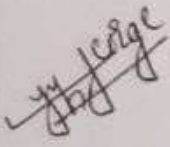
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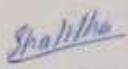



CERTIFICATE

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**

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(Affiliated to Mahatma Gandhi University)

2020-2022

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

(Affiliated to Mahatma Gandhi University)



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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

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*Shyamal*

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# 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**

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**SHILPA SHAJI**

**REG.NO:200011014849**



DEPARTMENT OF MATHEMATICS  
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**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*

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# TRIBONACCI CONVOLUTION TRIANGLE

*Project work submitted to*

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

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

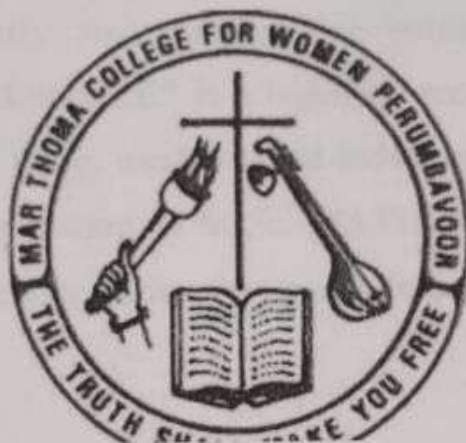
*Of*

**MASTER DEGREE IN MATHEMATICS**

*By*

**SOYA JOY**

**Reg. No: 200011014850**



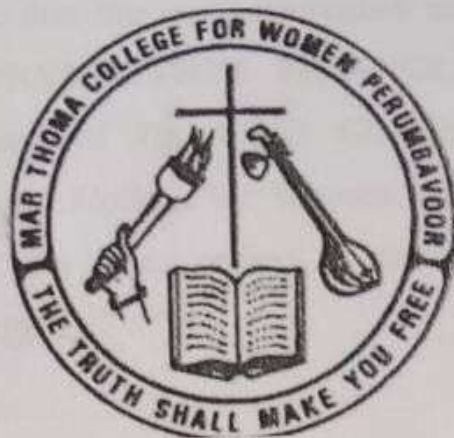
**DEPARTMENT OF MATHEMATICS  
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**2020-2022**

# MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR

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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.....

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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**

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**DEPARTMENT OF MATHEMATICS**

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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 .....

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*Shalika*  
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# **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

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**2020-2022**

MAR THOMA COLLEGE FOR WOMEN  
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**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.

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# 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**

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

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