WMO Arts and Science College, Muttil, Wayanad

Department of Mathematics

Criteria 1

1.3.2 Percentage of students undertaken project work/ field work/ internship

Academic year 2021- 2022

Sl no	Name of the Student	Title of the project	Guide's name and institution	UG/PG	Department
1.	Aiswarya Mohan	Tensor Analysis	Dr. Viji Paul, WMO Arts and Science College, Muttil	PG	Mathematics
2.	Aiswarya V.R	Topological Groups	Ms. Mini C, WMO Arts and Science College, Muttil	PG	Mathematics
3.	Anoop Francis	Z Transform	Mr. Santhosh Kumar C G, WMO Arts and Science College, Muttil	PG	Mathematics
4.	Anusree Mohaan	Complete metric space	Ms. Afeera M, WMO Arts and Science College, Muttil	PG	Mathematics
5.	Asna C H	Algebraic topology	Mr. Saneesh Babu, WMO Arts and Science College, Muttil	PG	Mathematics
6.	Ashwathy K V	Sigma labelling	Ms. Aswathi K, WMO Arts and Science College, Muttil	PG	Mathematics
7.	Athira K S	SIngle valued extension property	Ms. Anu Jose, WMO Arts and Science College, Muttil	PG	Mathematics
8.	Athira Suresh	Complete magic graph	Ms. Fathima Sithara, WMO Arts and Science College, Muttil	PG	Mathematics
9.	Athira Unnikrishnan	Spectral graph theory	Dr. Viji Paul, WMO Arts and Science College, Muttil	PG	Mathematics
10.	Basil Eldho	Frames in hilbert space	Mr. Saneesh Babu, WMO Arts and Science College, Muttil	PG	Mathematics
11.	Deepthy A	Introduction to lie algebra	Ms. Afeera M, WMO Arts and Science College, Muttil	PG	Mathematics
12.	Dhanusha M	Banach algebra	Ms. Anu Jose, WMO Arts and Science College, Muttil	PG	Mathematics
13.	Farsana N K	Graph products	Ms. Aswathi K, WMO Arts and Science College, Muttil	PG	Mathematics
14.	Hafsa T K	Discreete valuation on rings	Ms. Mini C, WMO Arts and Science College, Muttil	PG	Mathematics

15.	Haneena Sherbin	Domination in graphs	Ms. Fathima Sithara, WMO Arts and Science College, Muttil	PG	Mathematics
16.	Kavya P K	Bilinear form	Mr. Santhosh Kumar CG, WMO Arts and Science College, Muttil	PG	Mathematics
17.	Lebin Latheef	Zero divisor graph	Ms. Afeera M, WMO Arts and Science College, Muttil	PG	Mathematics
18.	Megha Shaji	Topological vector space	Ms. Mini C, WMO Arts and Science College, Muttil	PG	Mathematics
19.	Muhammed Shehin	Compactification	Mr. Saneesh Babu, WMO Arts and Science College, Muttil	PG	Mathematics
20.	Muhlisa V M	A study on energy of graphs	Ms. Fathima Sithara, WMO Arts and Science College, Muttil	PG	Mathematics
21.	Nihala Sherin	Non-linear programming	Ms. Aswathi K, WMO Arts and Science College, Muttil	PG	Mathematics
22.	Sandra V Jayapraksh	Rough set theory	Ms. Anu Jose, WMO Arts and Science College, Muttil	PG	Mathematics
23.	Shadhi Nilofer	Tribonacci convolution triangle	Mr. Santhosh Kumar C G, WMO Arts and Science College, Muttil	PG	Mathematics
24.	Shaharbanu	Nets and filters	Dr. Viji Paul, WMO Arts and Science College, Muttil	PG	Mathematics
25.	Shany Baby	Fuzzy graphs	Ms. Fathima Sithara, WMO Arts and Science College, Muttil	PG	Mathematics
26.	Shinoy Baby	Rings of continuous function	Ms. Afeera M, WMO Arts and Science College, Muttil	PG	Mathematics
27.	Abida	Introduction to coding theory	Ms. Fathima Sithara, WMO Arts and Science College, Muttil	UG	Mathematics
28.	Afeefa P R	Euler's polyhedral formula and its applications	Dr. Viji Paul, WMO Arts and Science College, Muttil	UG	Mathematics

29.	Ajay Sankar V	Rings and fields	Ms. Afeera M, WMO Arts and Science College, Muttil	UG	Mathematics
30.	Akhila Cs	A study on some mapping in complex analysis	Alsha Joseph, WMO Arts and Science College, Muttil	UG	Mathematics
31.	Ameena Asmi Cp	Catalan's numbers	Drishya T Das, WMO Arts and Science College, Muttil	UG	Mathematics
32.	Ameena Thasneem. N	Planar and non-planar graphs	Ms. Aswathi K, WMO Arts and Science College, Muttil	UG	Mathematics
33.	Anjana Sankar	Vedic Mathematics	Mr. Santhosh Kumar C G, WMO Arts and Science College, Muttil	UG	Mathematics
34.	Anu K Basheer	Some mapping in Complex Analysis	Ms. Alsha Joseph , WMO Arts and Science College, Muttil	UG	Mathematics
35.	Anusree Vijayan	Catalan Numbers and its applications	Ms. Drishya T Das, WMO Arts and Science College, Muttil	UG	Mathematics
36.	Ashida Fathima P P	Euler's polyhedral formula and its applications	Dr. Viji Paul, WMO Arts and Science College, Muttil	UG	Mathematics
37.	Aysha Liya	Graph Theory and It's Application	Ms. Mini C, WMO Arts and Science College, Muttil	UG	Mathematics
38.	Deepan S	Cryptography	Ms. Aswathi K, WMO Arts and Science College, Muttil	UG	Mathematics
39.	Drishwin R V	Coding theory	Ms. Fathima Sithara, WMO Arts and Science College, Muttil	UG	Mathematics
40.	Fahmiya	Euler's polyhedral formula and its application	Dr. Viji Paul, WMO Arts and Science College, Muttil	UG	Mathematics
41.	Farhana CH	Introduction to coding theory	Ms. Fathima Sithara, WMO Arts and Science College, Muttil	UG	Mathematics
42.	Fathima.C.M	Rings and fields	Ms. Afeera M, WMO Arts and Science College, Muttil	UG	Mathematics

43.	Muhammad	Coloring of graph theory	Mr. Santhosh Kumar CG, WMO Arts and Science College, Muttil	UG	Mathematics
44.	Munavvira Pm	Rings and fields	Ms. Afeera M, WMO Arts and Science College, Muttil	UG	Mathematics
45.	Naja Latheef A.T.	A brief study on planar graphs and nonplanar graphs	Ms. Aswathi K, WMO Arts and Science College, Muttil	UG	Mathematics
46.	Najiya Ec	Graph theory	Ms. Mini C, WMO Arts and Science College, Muttil	UG	Mathematics
47.	Najiya Nasrin	Graph theory and its application	Ms. Mini C, WMO Arts and Science College, Muttil	UG	Mathematics
48.	Pournami AG	Coloring of graphs and application	Mr. Santhosh Kumar C G, WMO Arts and Science College, Muttil	UG	Mathematics
49.	Ramziya E K	Introduction to cryptography	Ms. Aswathi K, WMO Arts and Science College, Muttil	UG	Mathematics
50.	Ruksana Ferbin	Vedic mathematics	Mr. Santhosh Kumar C G, WMO Arts and Science College, Muttil	UG	Mathematics
51.	Sana Kk	Introduction to Coding theory	Ms. Fathima Sithara, WMO Arts and Science College, Muttil	UG	Mathematics
52.	Seethalakshmi Kv	Cryptography	Ms. Aswathi K, WMO Arts and Science College, Muttil	UG	Mathematics
53.	Shahana P K	Rings and fields	Ms. Afeera M, WMO Arts and Science College, Muttil	UG	Mathematics
54.	Thejas Manoj	Eulers formula and its applications	Dr. Viji Paul, WMO Arts and Science College, Muttil	UG	Mathematics
55.	Vishnu P V	A Study of Some Mapping in Complex Analysis	Ms. Alsha Joseph, WMO Arts and Science College, Muttil	UG	Mathematics

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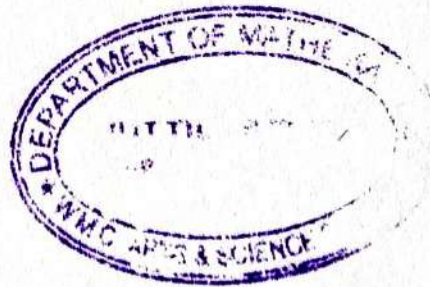
award of degree of

Master Of Science in Mathematics

Submitted by
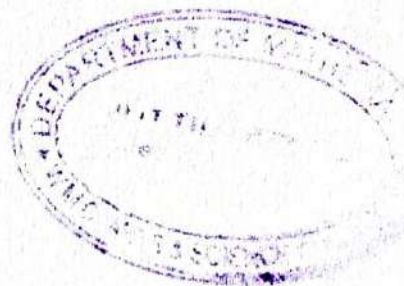
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IN

MATHEMATICS

by the

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COMPLETE METRIC SPACES

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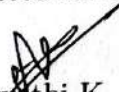**Department of Mathematics,**

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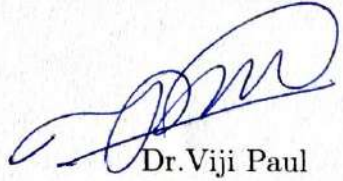## WMO Arts and Science college

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This is to certify that the dissertation entitled "**COMPLETE METRIC SPACES**" submitted by **ANUSREE MOHANAN** in partial fulfillment of the requirments for the degree of **Master of Science** in **Mathematics** is a result of bonafide project work carried out by her under my supervision at the Department of Mathematics, WMO Arts and Science college.

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INTRODUCTION TO ALGEBRAIC TOPOLOGY

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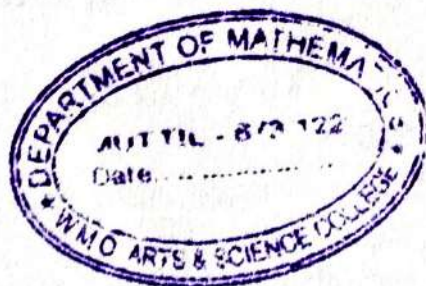
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INTRODUCTION TO SPECTRAL GRAPH THEORY

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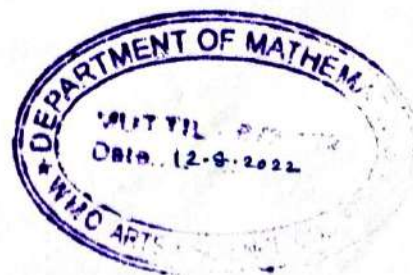
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INTRODUCTION TO LIE ALGEBRAS

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BANACH ALGEBRA

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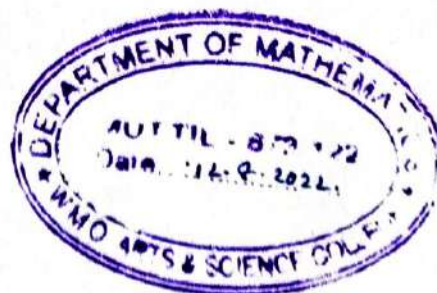
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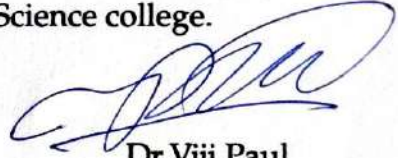
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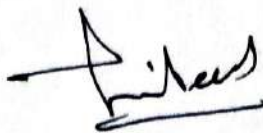
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project submitted to WMO Arts and science college in partial fulfilment of

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by

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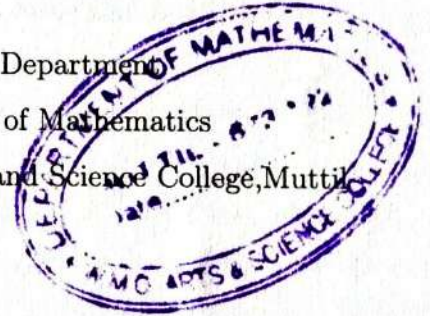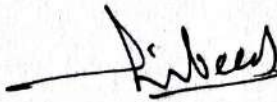WMO ARTS AND SCIENCE COLLEGE

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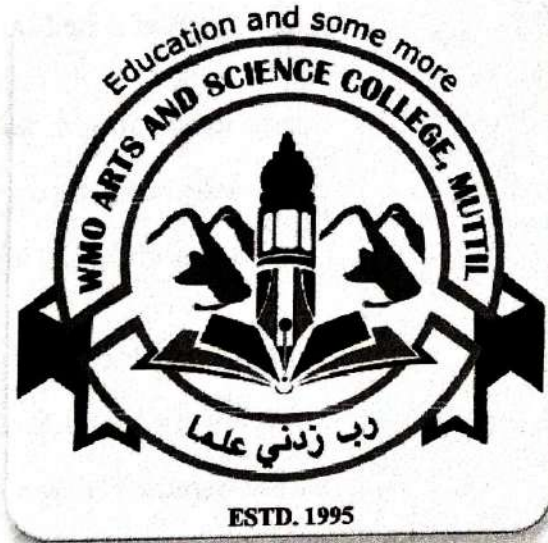   C.K.G.M. Govt. College, Perambra
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BILINEAR FORMS

Project submitted to WMO Arts and Science College,Muttil in partial fulfilment of the requirements for the award of the Degree of

MASTER OF SCIENCE IN MATHEMATICS

by

KAVYA P.K

Register Number:WMAUMMS018

DEPARTMENT OF MATHEMATICS

WMO ARTS AND SCIENCE COLLEGE,MUTTIL

2020-2022

ZERO DIVISOR GRAPH OF A COMMUTATIVE RING

Project submitted to

WMO ARTS & SCIENCE COLLEGE, MUTTIL

in partial fulfillment of the requirements for the award of the Degree of Master of

Science in

MATHEMATICS

from

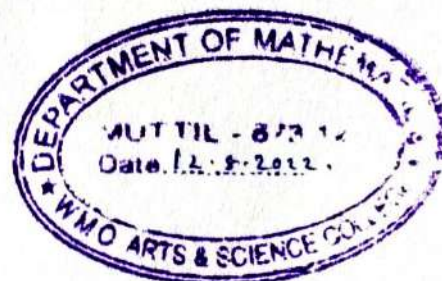## UNIVERSITY OF CALICUT

by

LEBIN LATHEEF
WMAUMMS019

Under the supervision of
Ms. AFEERA M

DEPARTMENT OF MATHEMATICS
WMO ARTS & SCIENCE COLLEGE, MUTTIL
AUGUST 2022

CERTIFICATE

This is to certify that the project entitled **"ZERO DIVISOR GRAPH OF A COMMUTATIVE RING "** submitted for the award of the M.Sc degree of the University of Calicut is a record of bonafide work carried out by the student: **LEBIN LATHEEF** under my supervision. No part of this project has been submitted for the award of any degree before.

Head,
Department of Mathematics
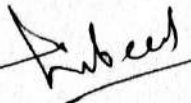
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Date:

Ms. AFEERA M

Assistant Professor

External Examiner

1. PRAJITH·P·C

2. **Dr. LIBEESHKUMAR K.B.**
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   Assistant Professor
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   Kozhikode, 673525 .

TOPOLOGICAL VECTOR SPACE

A Project submitted in the partial fulfillment of the requirement for the

award of degree of

Master Of Science in Mathematics

Submitted by

MEGHA SHAJI

Reg No: WMAUMMS020

Department of Mathematics,

WMO Arts and Science College

Muttil

DEPARTMENT OF MATHEMATICS
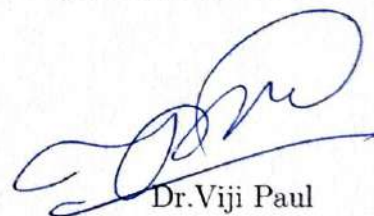## WMO Arts and Science college

CERTIFICATE

This is to certify that the dissertation entitled **"TOPOLOGICAL VECTOR SPACE"** submitted by **MEGHA SHAJI** in partial fulfillment of the requirments for the degree of **Master of Science** in **Mathematics** is a result of bonafide project work carried out by her under my supervision at the Department of Mathematics, WMO Arts and Science college.

Mini.C

Project guide

Assistant Professor

WMO Arts and Science College

Dr.Viji Paul

HOD, Department of Mathematics

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COMPACTIFICATIONS

Project submitted in partial fulfilment of the requirements for the award of

the Degree of

MASTER OF SCIENCE

IN

MATHEMATICS

by the

UNIVERSITY OF CALICUT

submitted by

MUHAMMED SHEHIN E

REG.NO.: WMAUMMS021

DEPARTMENT OF MATHEMATICS

WMO ARTS AND SCIENCE COLLEGE

MUTTIL

2022

W M O ARTS AND SCIENCE COLLEGE

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(Affiliated to the University of Calicut)

CERTIFICATE

This is to certify that the project entitled " **COMPACTIFICATIONS**", submitted by MUHAMMED SHEHIN E, in partial fulfilment of the requirements for the award of M.Sc. Degree in Mathematics by the University of Calicut during 2020-22 is a bonafide record of the studies undertaken by her under my guidance at the Department of Mathematics, WMO Arts and Science College,Muttil. This project has not been submitted for other degree else where.

Mr. SANEESH BABU

Assistant Professor

Project Guide

Dr. Viji Paul

Head, Department Of Mathematics

W M O Arts and Science College, Muttil

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2. Dr. LIBEESHKUMAR K.B.
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A STUDY ON ENERGY OF GRAPH

A Project submitted in the partial fulfilment of the requirement for the award of degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

MUHLISA V M

Reg.No:WMAUMMS023

DEPARTMENT OF MATHEMATICS

WMO Arts and Science Collge
Muttil

DEPARTMENT OF MATHEMATICS

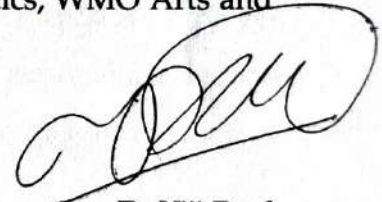## WMO Arts and Science College

CERTIFICATE

This is to certify that the dissertation entitled "A STUDY ON ENERGY OF GRAPH"

submitted by MUHLISA V M in partial fulfillment of the requirment for the degree

of Master of Science in Mathematics is a result of bonafide project work carried out

by her under my supervision at the Department of Mathematics, WMO Arts and

Science college.

Fathima Sithara   Dr.Viji Paul

Project Guide   HOD, Department of Mathematics

Assistant Professor   WMO Arts and Science College

WMO Arts and Science College   Muttil

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NON LINEAR PROGRAMMING

A Project submitted in the partial fulfilment of the requirement for the award of degree of

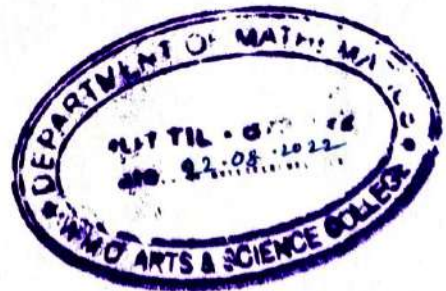## MASTER OF SCIENCE IN MATHEMATICS

Submitted by

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Muttil

DEPARTMENT OF MATHEMATICS

WMO Arts and Science College

CERTIFICATE

This is to certify that the dissertation entitled "NON LINEAR PROGRAMMING"

submitted by NIHALA SHERIN C K in partial fulfillment of the requirment for

the degree of Master of Science in Mathematics is a result of bonafide project work

carried out by her under my supervision at the Department of Mathematics, WMO

Arts and Science college.

Aswathi K

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ROUGH SET

A Project submitted in the partial fulfillment of the requirement for the
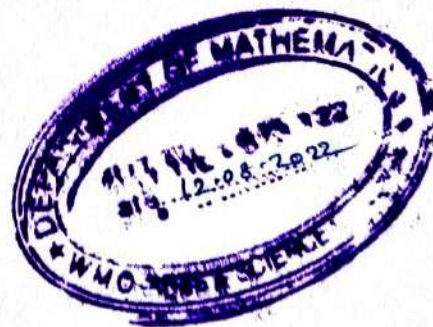
award of degree of

Master Of Science in Mathematics

Submitted by

SANDRA V JAYAPRAKASH

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Department of Mathematics,

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WMO Arts and Science college

CERTIFICATE

This is to certify that the dissertation entitled "**ROUGH SET**" submitted by **SANDRA V JAYAPRAKASH** in partial fulfillment of the requirments for the degree of **Master of Science** in **Mathematics** is a result of bonafide project work carried out by her under my supervision at the Department of Mathematics,WMO Arts and Science college.

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Dr.Viji Paul

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WMO Arts and Science College

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External Escaminer:

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2. **Dr. LIBEESHKUMAR K.B.**
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   Kozhikode, 673525

TRIBONACCI CONVOLUTION TRIANGLE

Project submitted to WMO Arts and Science College,Muttil in partial fulfilment of the requirements for the award of the Degree of

MASTER OF SCIENCE IN MATHEMATICS

by

SHADI NILOFER

Register Number:WMAUMMS026

DEPARTMENT OF MATHEMATICS

WMO ARTS AND SCIENCE COLLEGE,MUTTIL

2020-2022

CERTIFICATE

This is to certify that the project entitled " **TRIBONACCI CONVOLUTION TRI-ANGLE** ", submitted by Ms.SHADI NILOFER , in partial fulfilment of the requirements for the award of M.Sc. Degree in Mathematics of the University of Calicut during 2020-2022 is a bonafide record of the studies undertaken by her under my guidance at the Department of Mathematics,WMO ARTS AND SCIENCE COLLEGE,MUTTIL.

Dr.Viji Paul

Dr.Viji Paul

Associate Professor

Head of the Department

Department of Mathematics

Department of Mathematics

WMO Arts and Science College,Muttil

WMO Arts and Science College,Muttil

External Examiner:

Place:Muttil

Date: 16|08|2022

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NETS AND FILTERS

A Project submitted in the partial fulfilment of the requirement for the award of degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

SHAHARBANU.N

Reg.No:WMAUMMS027

DEPARTMENT OF MATHEMATICS

WMO Arts and Science Collge

Muttil

2022

DEPARTMENT OF MATHEMATICS

WMO Arts and Science College

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This is to certify that the dissertation entitled "Nets and Filters" submitted by

SHAHARBANU.N in partial fulfillment of the requirment for the degree of Master of

Science in Mathematics is a result of bonafide project work carried out by her under my

supervision at the Department of Mathematics, WMO Arts and Science college.

Dr. VIJI PAUL

Dr. VIJI PAUL

Project Guide

HOD, Department of Mathematics

HOD, Department of Mathematics

WMO Arts and Science College,Muttil

WMO Arts and Science College,Muttil

External Examiner.

1) PRAJITH. P. C

2)

FUZZY GRAPH

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award of degree of

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Submitted by

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DEPARTMENT OF MATHEMATICS

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This is to certify that the dissertation entitled **"FUZZY GRAPH"** submitted by **SHANY BABY** in partial fulfillment of the requirments for the degree of **Master of Science** in **Mathematics** is a result of bonafide project work carried out by her under my supervision at the Department of Mathematics,WMO Arts and Science college.

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Dr. LIBEESHKUMAR K.B.
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RINGS OF CONTINUOUS FUNCTION

Project submitted in partial fulfilment of the requirements for the award of

the Degree of

MASTER OF SCIENCE

IN

MATHEMATICS

by the

UNIVERSITY OF CALICUT

submitted by

SHINOY BABY

REG.NO.:WMAUMMS029

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WMO ARTS AND SCIENCE COLLEGE

MUTTIL

2022

W M O ARTS AND SCIENCE COLLEGE

MUTTIL

(Affiliated to the University of Calicut)

CERTIFICATE

This is to certify that the project entitled " **RINGS OF CONTINUOUS FUNCTION**", submitted by **SHINOY BABY**, in partial fulfilment of the requirements for the award of M.Sc. Degree in Mathematics by the University of Calicut during 2020-22 is a bonafide record of the studies undertaken by her under my guidance at the Department of Mathematics, WMO Arts and Science College,Muttil.

Mrs.AFFERA AZAR

Assistant Professor

Project Guide

Dr. Viji Paul

Head, Department Of Mathematics

W M O Arts and Science College, Muttil

External Escaminers

1. PRAJITH. P.C   PCP

2. Dr. LIBEESHKUMAR K.B.
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Assistant Professor
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Kozhikode, 673525

EULER'S POLYHEDRAL FORMULA AND

ITS APPLICATIONS

A project report submitted to the University of Calicut in partial fulfillment of the requirements for the award of Degree of Bachelor of Science in Mathematics

Submitted by: FAHMIYA

Reg. No.: WMATSMT001

Under the guidance of:

Dr. Viji Paul
(Head, Department of Mathematics)

Department of Mathematics

W M O Arts & Science College, Muttil
2019-2022

WMO ARTS AND SCIENCE COLLEGE
MUTTIL

CERTIFICATE

I hereby certify that this project entitled **"EULER'S POLYHEDRAL FORMULA AND ITS APPLICATIONS"** is a bona fide record of the work carried out by **FAHMIYA** under my supervision, in partial fulfillment of the requirements for the award of Bachelor of Science in Mathematics from the University of Calicut during the academic year 2019-2022.

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Associate Professor & Head
Department of Mathematics
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Muttil P.O, Wayanad - 673 122

Dr. VIJI PAUL

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LATHEESH KUMAR.A.R.
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S.BATHERY, WAYANAD

GRAPH THEORY AND IT'S APPLICATIONS

A project report submitted to the University of Calicut in partial fulfillment of the requirements for the award of Degree of BSc Mathematics

Submitted by

Name: Najiya Nasrin.

Reg.no: WMA7S M7002.

Under the guidance of

Ms. Mini C

Lecture in Department of Mathematics

Department of Mathematics

W.M.O Arts and Science College Muttil

2019-2022

CERTIFICATE

I hereby certify that this project entitled **"GRAPH THEORY AND IT'S APPLICATIONS "** is a bonafide record of the work carried out by *Najiya Nasrin* .... under my supervision, in partial fulfillment of requirements for the award of BSc Mathematics from the University of Calicut during the academic year 2021-2022

Ms. Mini C

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Dr. VIJI PAUL

Head of the department

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Dr. VIJI PAUL
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LATHEESH KUMAR.A.R.
ASSISTANT PROFESSOR
DEPARTMENT OF MATHEMATICS
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S.BATHERY, WAYANAD

INTRODUCTION TO CRYPTOGRAPHY

Submitted by

RAMZIYA E.K
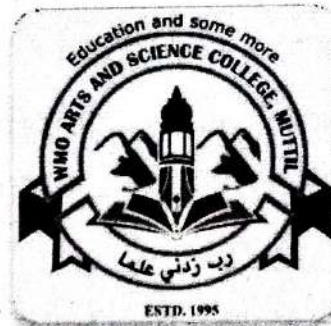
Reg. No.: WMATSMT003

Under The Guidance Of

Ms. DRISHYA T DAS

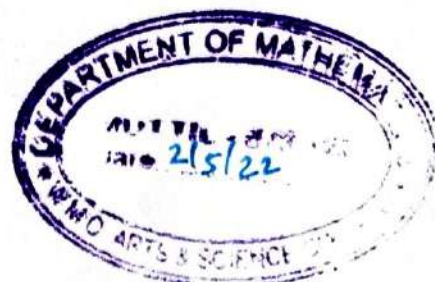(Assistant Professor, Department of Mathematics, WMO Arts & Science College, Muttil)

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

Degree of Bachelor of Science in Mathematics

by the University of Calicut

WMO ARTS AND SCIENCE COLLEGE, MUTTIL

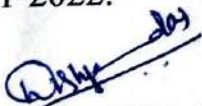# 2019-2022

WMO ARTS AND SCIENCE COLLEGE

MUTTIL, WAYANAD

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CERTIFICATE

This is to certify that **RAMZIYA E.K.** is a bonafide student of the department of mathematics, WMO Arts and Science College, Muttil and this project entitled **"INTRODUCTION TO CRYPTOGRAPHY"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2021-2022.

Ms. DRISHYA T DAS

Project Guide

Dr. VIJI PAUL

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INTRODUCTION TO CODING THEORY

Submitted By,

ABIDA

Reg.No:WMATSMT004

Under the guidance of,

FATHIMA SITHARA

(Assistant Professor, Department of Mathematics , WMO Arts & Science College , Muttil)

Project submitted in the partial fulfillment of the requirements for the award of the

DEGREE OF BACHELOR OF SCIENCE IN MATHEMATICS OF THE UNIVERSITY OF CALICUT

WMO ARTS AND SCIENCE COLLEGE MUTTIL2019-2022

1
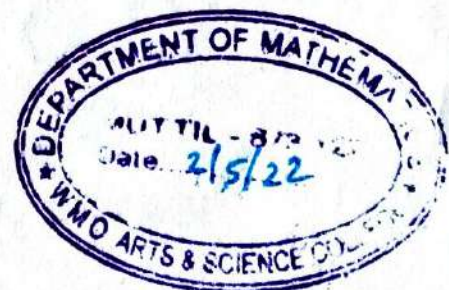
WMO ARTS AND SCIENCE COLLEGE

MUTTIL, WAYANAD

(Affiliated by University of Calicut & Accredited A grade by NAAC)

<u>CERTIFICATE</u>

This is to certify that **ABIDA** is a student of department of **MATHEMATICS, WMO Arts and Science College, Muttil** and this project entitled **"INTRODUCTION TO CODING THEORY"** has been prepared by her in the partial fulfillment of the requirement for the award of degree of Bachelor of Science in Mathematics by the University of Calicut during the academic year 2021-2022.

FATHIMA SITHARA

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LATHEESH KUMAR.A.R.
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2

GRAPH THEORY AND IT'S APPLICATIONS

A project report submitted to the University of Calicut in partial fulfillment of the requirements for the award of Degree of BSc Mathematics

Submitted by

Name: AYSHA LIYA

Reg.no: W MA7 SM7 005

Under the guidance of

Ms. Mini C

Lecture in Department of Mathematics

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W.M.O Arts and Science College Muttil

2019-2022

CERTIFICATE

I hereby certify that this project entitled **"GRAPH THEORY AND IT'S APPLICATIONS "** is a bonafide record of the work carried out by .... *AYSHA LIYA* .... under my supervision, in partial fulfillment of requirements for the award of BSc Mathematics from the University of Calicut during the academic year 2021-2022

Ms. Mini C

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RINGS AND FIELDS

Submitted by

MUNAVVIRA PM

Reg. No.: WMATSMT006

Under The Guidance Of

Mrs. AFEERA M

(Assistant professor, Department Of Mathematics, W M O Arts and Science College, Muttil)

Project Submitted in partial fulfillment of the requirement for the award of the degree of the
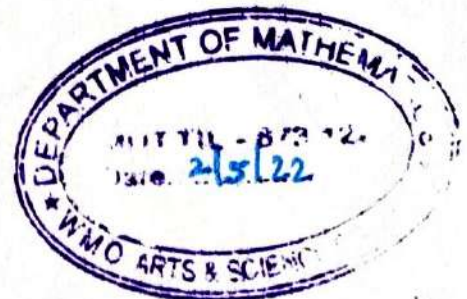
Degree of Bachelor of Science in

Mathematics by the University Of Calicut

W M O ARTS AND SCIENCE COLLEGE

MUTTIL

2019-2022

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MUTTIL

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CERTIFICATE

This is to certify that **MUNAVVIRA PM** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"RINGS AND FIELDS"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022.

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Project Guide

Dr. VIJI PAUL

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Dr. VIJI PAUL
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STUDY OF PLANAR AND NON-PLANAR GRAPH

Submitted by

NAJIYA E C
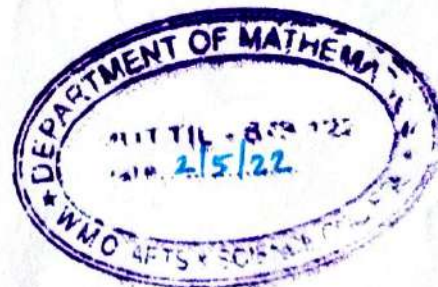**Reg.No: WMATSMT007**

Under The Guidance Of

Mrs. ASWATHI K

(Assistant professor, Department of Mathematics, WMO Arts and Science College, Muttil)

Project Submitted in partial fulfilment of the requirement for the award of the degree of the

Degree of Bachelor of Science in Mathematics by the University of Calicut

WMO ARTS AND SCIENCE COLLEGE MUTTIL
2019-2022

1

WMO ARTS AND SCIENCE COLLEGE
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This is to certify that **NAJIYA E C** is a student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"STUDY OF PLANAR AND NON-PLANAR GRAPHS"** has been prepared by her in the partial fulfilment of the requirement for the award of the Degree of Bachelor OfScience in Mathematics by the University Of Calicut during the academic year 2019- 2022.

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COLORING OF GRAPHS AND APPLICATION

Submitted by

POURANAMI A G

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W M O ARTS AND SCIENCE COLLEGE

MUTTIL

2019-2022

W M O ARTS AND SCIENCE COLLEGE

MUTTIL

(Affiliated to the University of Calicut)

CERTIFICATE

This is to certify that **POURANAMI A G** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"COLORING OF GRAPHS AND APPLICATION"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022

Mr. SANTHOSH KUMAR C G

Project Guide

സന്തോഷ് കുമാർ സി.ജി
പ്രൊഫസർ
ഗണിതശാസ്ത്ര വിഭാഗം
ഡബ്ലു. എം. ഓ. ആർട്സ് &
സയൻസ് കോളേജ്, മുട്ടിൽ വയനാ

Dr. VIJI PAUL

Head, Department Of Mathematics

W M O Arts and Science College, Muttil

INTRODUCTION TO CRYPTOGRAPHY

Submitted by

SEETHA LAKSHMI K V

Reg.No.: WMATSMT009

Under The Guidance Of

Ms. DRISHYA T DAS

(Assistant Professor, Department of Mathematics,

WMO Arts &Science College, Muttil)

Project Submitted in partial fulfillment of the requirement for the award

of the degree of the

Degree of Bachelor of Science in Mathematics

by the University of Calicut

WMO ARTS AND SCIENCE COLLEGE, MUTTIL

2019-2022

WMO ARTS AND SCIENCE COLLEGE

MUTTIL, WAYANAD

(Affiliated to the University of Calicut)

CERTIFICATE

This is to certify that **SEETHA LAKSHMI K V** is a bonafide student of the department of mathematics, WMO Arts and Science College, Muttil and this project entitled **"INTRODUCTION TO CRYPTOGRAPHY"** has been prepared by here in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2021-2022.

Ms. DRISHYA T DAS

Project Guide

Dr. VIJI PAUL

Head, Department of Mathematics

WMO Arts and Science College, Muttil

INTRODUCTION TO CRYPTOGRAPHY

Submitted by

DEEPAN S

Reg.No.:WMATSMT010

UnderTheGuidanceOf

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(AssistantProfessor,DepartmentofMathematics,WMOArts&ScienceCollege,Muttil)

ProjectSubmittedinpartialfulfillmentoftherequirement forthe awardofthedegreeof the

Degree of Bachelor of Science in Mathematics

by theUniversityofCalicut

WMO ARTS AND SCIENCE COLLEGE, MUTTIL

2019-2022

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CERTIFICATE

This is to certify that **DEEPAN S** .is a bonafide student of the department ofmathematics, WMO Arts and Science College, Muttil and this project entitled**"INTRODUCTION TO CRYPTOGRAPHY"** has been prepared by herin the partial fulfillment of the requirement for the award of the Degree ofBachelor Of Science in Mathematics by the University Of Calicut during theacademic year 2021-2022.

Ms.DRISHYA T DAS

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INTRODUCTION TO CODING THEORY

Submitted By,

DRISHWIN R V

Reg.No:WMATSMT011

Under the guidance of,

FATHIMA SITHARA

(Assistant Professor, Department of Mathematics , WMO Arts & Science College , Muttil)

Project submitted in the partial fulfillment of the requirements for the award of the

DEGREE OF BACHELOR OF SCIENCE IN MATHEMATICS OF THE UNIVERSITY OF CALICUT

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CERTIFICATE

This is to certify that **DRISHWIN R V** is a student of department of **MATHEMATICS, WMO Arts and Science College, Muttil** and this project entitled **"INTRODUCTION TO CODING THEORY"** has been prepared by her in the partial fulfillment of the requirement for the award of degree of Bachelor of Science in Mathematics by the University of Calicut during the academic year 2021-2022.

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2

EULER'S POLYHEDRAL FORMULA AND

ITS APPLICATIONS

A project report submitted to the University of Calicut in partial fulfillment of the requirements for the award of Degree of Bachelor of Science in Mathematics

Submitted by: AFEEFA P R

Reg. No.: WMATSMT012

Under the guidance of:

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Department of Mathematics

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2019-2022

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CERTIFICATE

I hereby certify that this project entitled **"EULER'S POLYHEDRAL FORMULA AND ITS APPLICATIONS"** is a bona fide record of the work carried out by **AFEEFA P R** under my supervision, in partial fulfillment of the requirements for the award of Bachelor of Science in Mathematics from the University of Calicut during the academic year 2019-2022.

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A STUDY ON SOME MAPPING IN COMPLEX ANALYSIS

Submitted by

AKHILA CS

Reg. No.: WMATSMT013

Under The Guidance Of

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2019-2022

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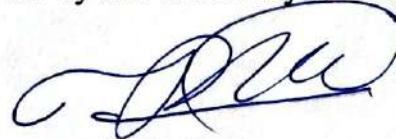### (Affiliated to the University of Calicut)

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This is to certify that **AKHILA C S** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"A Study on Some Mapping in Complex Analysis"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2021-2022.

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CATALAN NUMBERS AND IT'S APPLICATIONS

Submitted by

AMEENA ASMI C P

Reg. No.: WMATSMT014

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

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This is to certify that **AMEENA ASMI C P** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"Catalan numbers and it's applications"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022.

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STUDY OF PLANAR AND NON-PLANAR GRAPH

Submitted by

AMEENA THASNEEM .N
Reg.No: WMATSMT015

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This is to certify that **AMEENA THASNEEM. N** is a student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"STUDY OF PLANAR AND NON-PLANAR GRAPHS"** has been prepared by her in the partial fulfilment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022.

Mrs. ASWATHI K

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A STUDY OF SOME TECHNIQUES IN VEDIC MATHEMATICS

Submitted by,

ANJANA SANKAR

Reg.No: WMATSMT016

Under the guidance of,

Mr. Santhosh Kumar C G

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ESTD. 1995

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This is to certify that **ANJANA SANKAR** is a student of department of MATHEMATICS, WMO Arts and Science College, Muttil and this project entitled **"A STUDY OF SOME TECHNIQUES IN VEDIC MATHEMATICS"** has been prepared by her in the partial fulfilment of the requirement of the award of Degree of Bachelor of Science of Mathematics by the University of Calicut during the academic year 2021-2022.

Mr. SANTHOSH KUMAR C G

Project guide

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ഗണിതശാസ്ത്ര വിഭാഗം
ഡബ്ല്യു. എം. ഓ. ആർട്സ് &
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2

A STUDY ON SOME MAPPING IN COMPLEX ANALYSIS

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ANU K BASHEER

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This is to certify that **ANU K BASHEER** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"A Study on Some Mapping in Complex Analysis"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2021-2022.

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CATALAN NUMBERS AND IT'S APPLICATIONS

Submitted by

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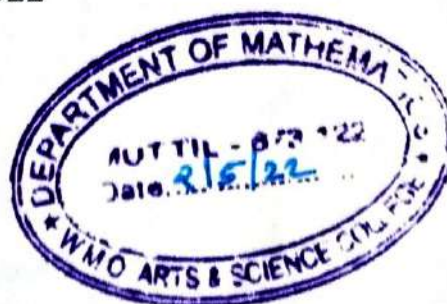
Degree of Bachelor of Science in Mathematics

by the University Of Calicut

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This is to certify that **ANUSREE VIJAYAN** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"Catalan numbers and it's applications"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2021-2022.

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EULER'S POLYHEDRAL FORMULA AND

ITS APPLICATIONS

A project report submitted to the University of Calicut in partial fulfillment of the requirements for the award of Degree of Bachelor of Science in Mathematics

Submitted by: ASHIDA FATHIMA P P

Reg. No.: WMATSMT019

Under the guidance of:

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I hereby certify that this project entitled **"EULER'S POLYHEDRAL FORMULA AND ITS APPLICATIONS"** is a bona fide record of the work carried out by **ASHIDA FATHIMA P P** under my supervision, in partial fulfillment of the requirements for the award of Bachelor of Science in Mathematics from the University of Calicut during the academic year 2019-2022.

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INTRODUCTION TO CODING THEORY

Submitted By,

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This is to certify that **FARHANA CH** is a student of department of **MATHEMATICS, WMO Arts and Science College, Muttil** and this project entitled **"INTRODUCTION TO CODING THEORY"** has been prepared by her in the partial fulfillment of the requirement for the award of degree of Bachelor of Science in Mathematics by the University of Calicut during the academic year 2021-2022.

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2

RINGS AND FIELDS

Submitted by

FATHIMA CM

Reg.No.:WMATSMT021

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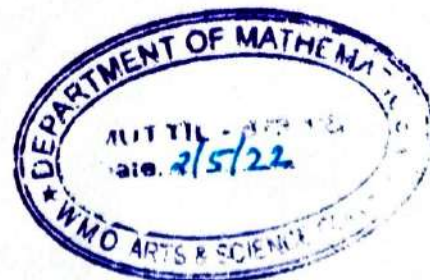
Degree of Bachelor of Science in

Mathematics by the University Of Calicut

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This is to certify that **FATHIMA CM** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"RINGS AND FIELDS"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022.

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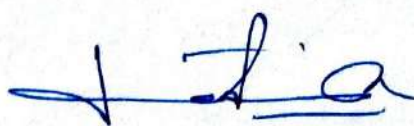
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INTRODUCTION TO CRYPTOGRAPHY

Submitted by

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Reg. No.: WMATSMT022

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This is to certify that **HARSHITHA MUSTHAFA.** is a bonafide student of the department of mathematics, WMO Arts and Science College, Muttil and this project entitled **"INTRODUCTION TO CRYPTOGRAPHY"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2021-2022.

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COLORING OF GRAPHS AND APPLICATION

Submitted by

JASLEENA P M

Reg. No.: WMATSMT023

Under The Guidance Of

Mr. SANTHOSH KUMAR C G

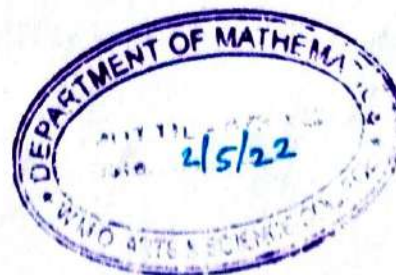(Assistant professor, Department Of Mathematics, W M O Arts and Science College, Muttil)

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This is to certify that **JASLEENA P M** is a bonafide student of the department of mathematics, **W M O** Arts and Science College, Muttil and this project entitled **"COLORING OF GRAPHS AND APPLICATION"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022

Mr. SANTHOSH KUMAR C G

Project Guide

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ഗണിതശാസ്ത്ര വിഭാഗം
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സയൻസ് കോളേജ്, മുട്ടിൽ, വയനാട്

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A STUDY OF SOME TECHNIQUES IN VEDIC MATHEMATICS

Submitted by,

LULU K P

Reg.No: WMATSMT024

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Project submitted in the partial fulfilment of the requirements for the award of the

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Mr. SANTHOSH KUMAR C G

Project guide

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ഡബ്ല്യൂ. എം. ഓ. ആർട്സ് &
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2

STUDY OF PLANAR AND NON-PLANAR GRAPH

Submitted by

NAJA LATHEEF A T
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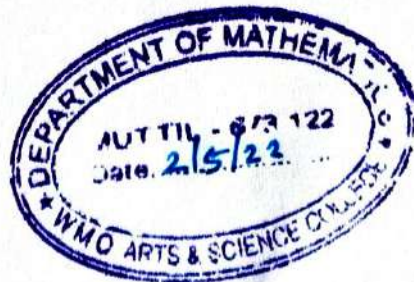
Under The Guidance Of

Mrs. ASWATHI K

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Project Submitted in partial fulfilment of the requirement for the award of the degree of the

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This is to certify that **NAJA LATHEEF A T** is a student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"STUDY OF PLANAR AND NON-PLANAR GRAPHS"** has been prepared by her in the partial fulfilment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022.

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2

A STUDY ON SOME MAPPING IN COMPLEX ANALYSIS

Submitted by

RAFEEKHA MUMTHAZ V K

Reg. No.: WMATSMT026

Under The Guidance Of

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Degree of Bachelor of Science in Mathematics

by the University Of Calicut

W M O ARTS AND SCIENCE COLLEGE

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This is to certify that **RAFEEKHA MUMTHAZ V K** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"A STUDY ON SOME MAPPING IN COMPLEX ANALYSIS"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2021-2022.

Ms. ALSHA JOSEPH

Project Guide

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A STUDY OF SOME TECHNIQUES IN VEDIC MATHEMATICS

Submitted by,

RUKSANA FERBIN

Reg.No: WMATSMT027

Under the guidance of,

Mr. Santhosh Kumar C G

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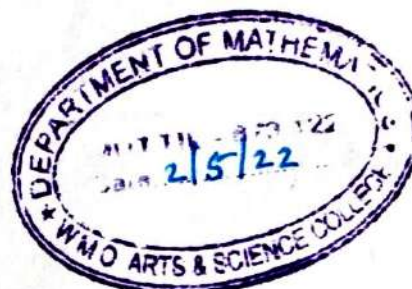
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WMO ARTS AND SCIENCE COLLEGE, MUTTIL

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This is to certify that **RUKSANA FERBIN** is a student of department of MATHEMATICS, WMO Arts and Science College, Muttil and this project entitled **"A STUDY OF SOME TECHNIQUES IN VEDIC MATHEMATICS"** has been prepared by her in the partial fulfilment of the requirement of the award of Degree of Bachelor of Science of Mathematics by the University of Calicut during the academic year 2021-2022.

Mr. SANTHOSH KUMAR C G

Project guide

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2

CATALAN NUMBERS AND IT'S APPLICATIONS

Submitted by

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INTRODUCTION TO CODING THEORY

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COLORING OF GRAPHS AND APPLICATION

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അസിസ്റ്റന്റ് പ്രൊഫസർ
ഗണിതശാസ്ത്ര വിഭാഗം
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A STUDY OF SOME TECHNIQUES IN VEDIC MATHEMATICS

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ഗണിതശാസ്ത്ര വിഭാഗം
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RINGS AND FIELDS

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GRAPH THEORY AND IT'S APPLICATIONS

A project report submitted to the University of Calicut in partial fulfillment of the requirements for the award of Degree of BSc Mathematics

Submitted by

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This is to certify that **AJAY SANKAR V** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"RINGS AND FIELDS"** has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022.

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STUDY OF PLANAR AND NON-PLANAR GRAPH

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This is to certify that **AJNAS . P** is a student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled **"STUDY OF PLANAR AND NON-PLANAR GRAPHS"** has been prepared by him in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019- 2022.

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COLORING OF GRAPHS AND APPLICATION

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This is to certify that **MUHAMMAD BASHEER K** is a bonafide student of the department of mathematics, W M O Arts and Science College, Muttil and this project entitled "**COLORING OF GRAPHS AND APPLICATION**" has been prepared by her in the partial fulfillment of the requirement for the award of the Degree of Bachelor Of Science in Mathematics by the University Of Calicut during the academic year 2019-2022

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GRAPH THEORY AND IT'S APPLICATIONS

A project report submitted to the University of Calicut in partial fulfillment of the requirements for the award of Degree of BSc Mathematics

Submitted by

Name: SHAFIE KHALID ABDULLA

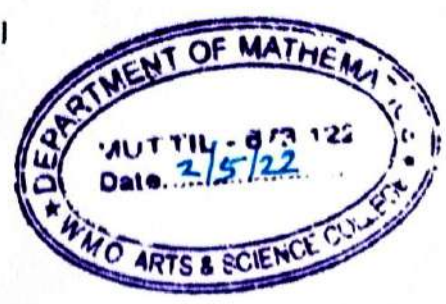Reg.no: WMATSMT037

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EULER'S POLYHEDRAL FORMULA AND

ITS APPLICATIONS

A project report submitted to the University of Calicut in partial fulfillment of the requirements for the award of Degree of Bachelor of Science in Mathematics

Submitted by: THEJAS MANOJ

Reg. No.: WMATSMT038

Under the guidance of:

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I hereby certify that this project entitled **"EULER'S POLYHEDRAL FORMULA AND ITS APPLICATIONS"** is a bona fide record of the work carried out by **THEJAS MANOJ** under my supervision, in partial fulfillment of the requirements for the award of Bachelor of Science in Mathematics from the University of Calicut during the academic year 2019-2022.

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A STUDY ON SOME MAPPING IN COMPLEX ANALYSIS

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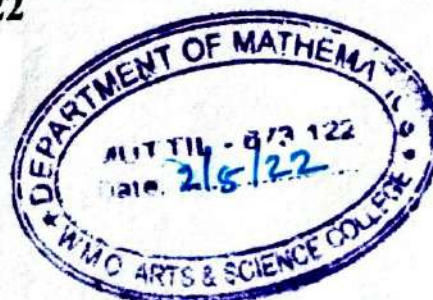
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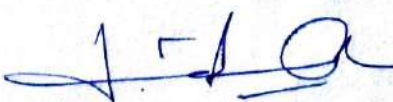### (Affiliated to the University of Calicut)

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