

A STUDY ON SECOND ORDER LINEAR DIFFERENTIAL EQUATIONS

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
fulfillment of the requirements for award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

Submitted by

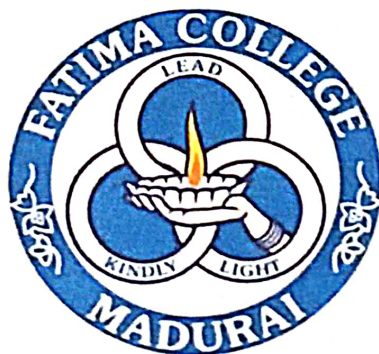
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2022MSCM01

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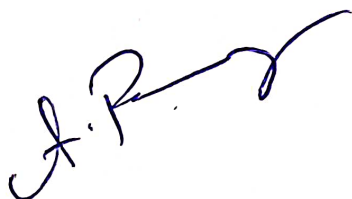
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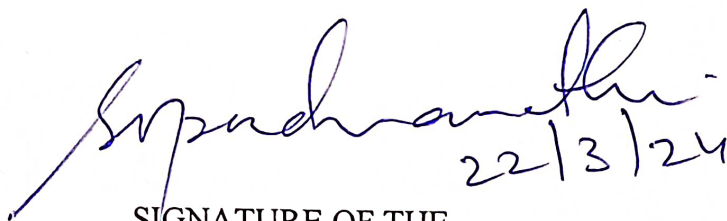
This to certify that the project entitled, **“A STUDY ON SECOND ORDER LINEAR DIFFERENTIAL EQUATIONS”** submitted by **P.AARTHI (2022MSCM01)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

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A STUDY ON POPULATION MODELS.

A project work submitted to
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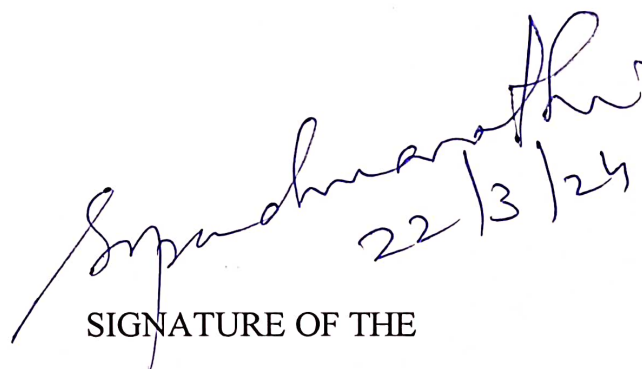
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A STUDY ON APPLICATION OF LOGISTIC MODEL ON THE SPREAD OF HIV/AIDS.

A project work submitted to
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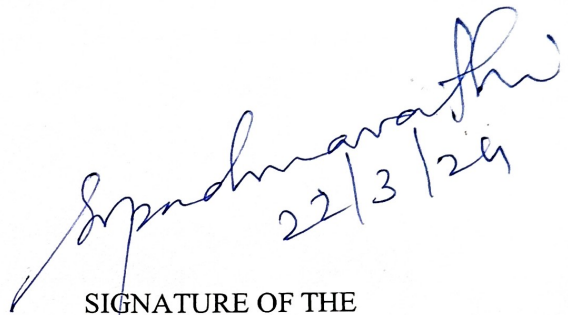
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A STUDY ON CORDIAL GRAPH AND ITS APPLICATIONS

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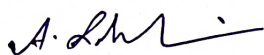
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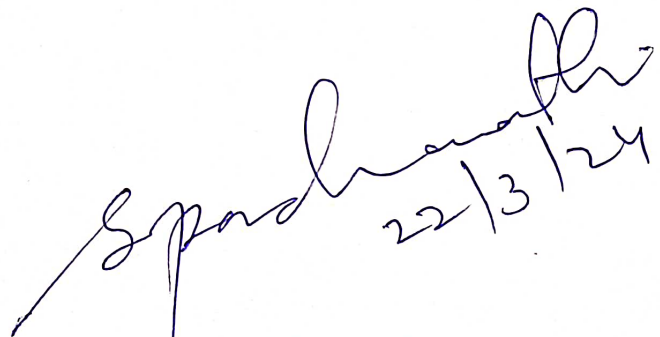
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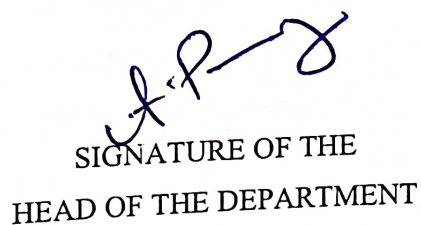
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A STUDY ON STEINER DIAMETER AND STEINER NUMBER OF A GRAPH

A project work submitted to
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Submitted by

S. DEVADHARSHINI

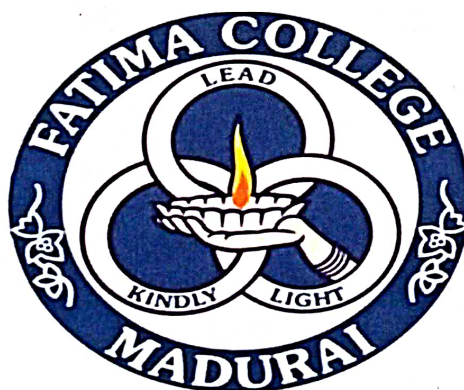
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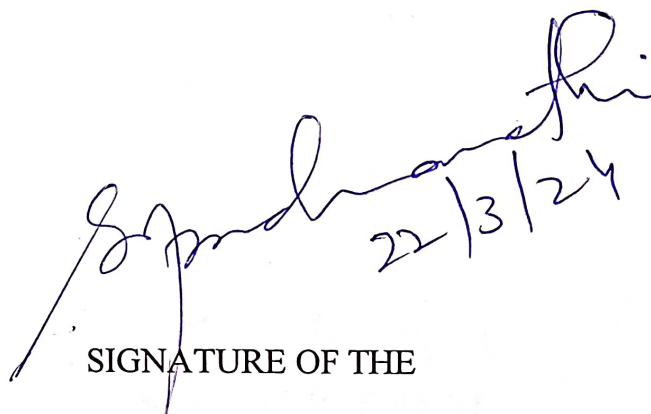
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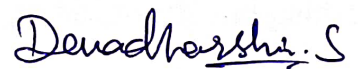
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A STUDY ON ALGORITHMS, P_3 -COLORING AND H-COLORING ON GRAPHS

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Submitted by

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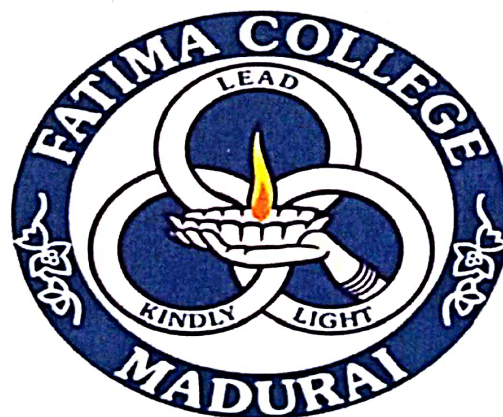
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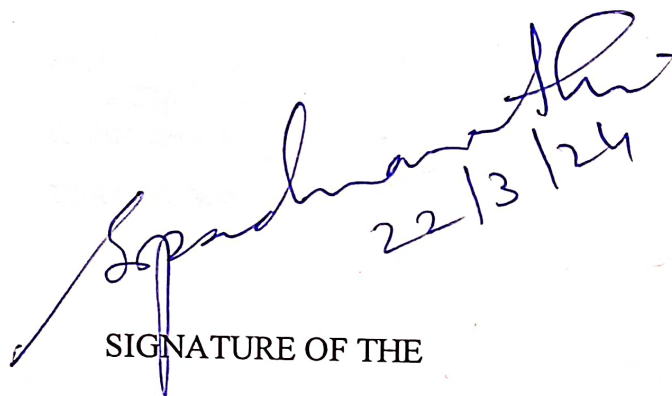
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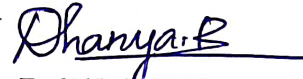
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R. DHANYA

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GRAPH ENERGIES AND TOPOLOGICAL INDICES OF TRIGLYCERIDE

A project work submitted to
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MASTER OF SCIENCE IN MATHEMATICS

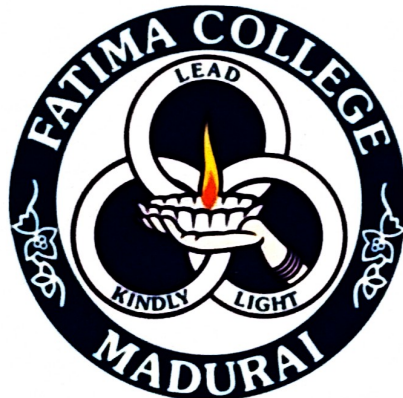
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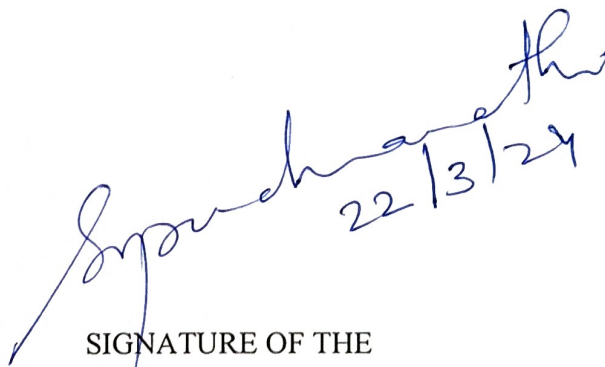
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A STUDY ON DELAY DIFFERENTIAL EQUATIONS

A project work submitted to
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MASTER OF SCIENCE IN MATHEMATICS

Submitted by

B. KARTHIKA

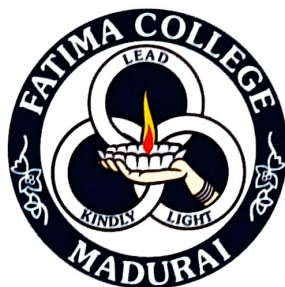
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2022MSCM20

A STUDY ON DIGITAL IMAGE ENCRYPTION USING ELLIPTICAL CURVE CRYPTOGRAPHY

A project work submitted to
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MASTER OF SCIENCE IN MATHEMATICS

Submitted by

M. MICHLINE SOWMIYA

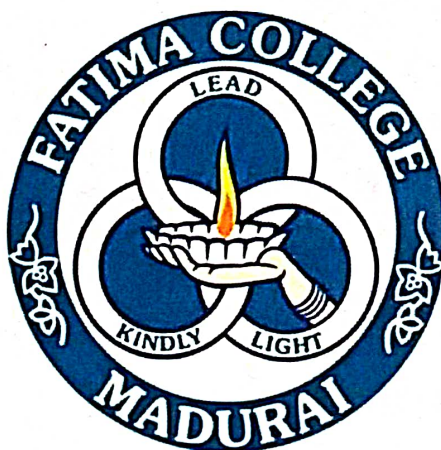
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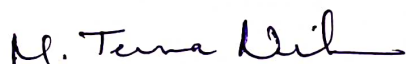
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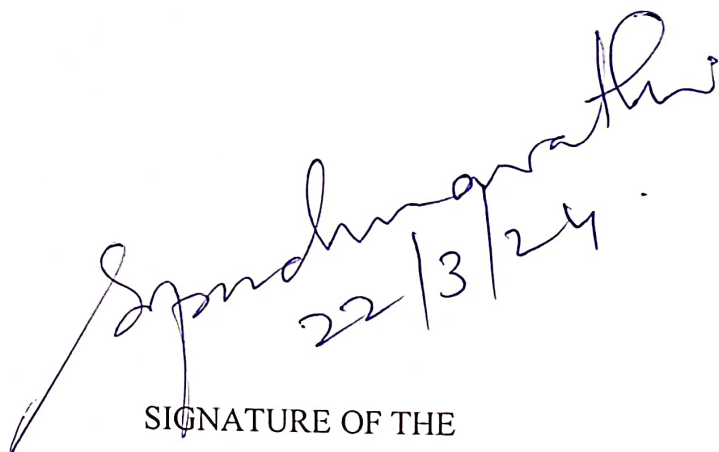
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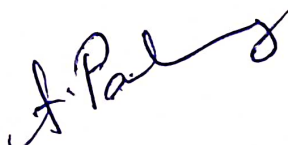
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Place: Madurai

M. MICHLINE SOWMIYA

Date: 22.03.2024.

2022MSCM23

A STUDY ON APPLICATION OF GRAPH IN CRYPTOGRAPHY

A project work submitted to
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Submitted by

J. NISHA

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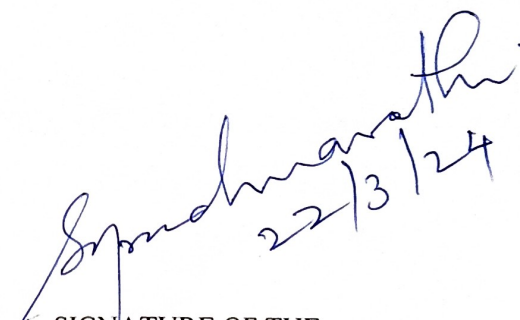
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J. Nisha

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**A STUDY ON COMPUTATIONAL METHOD FOR COMBINATORIAL
GEOMETRIC SERIES**

A project work submitted to
MADURAI KAMARAJ UNIVERSITY
in partial fulfillment of the
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MASTER OF SCIENCE IN MATHEMATICS

Submitted by

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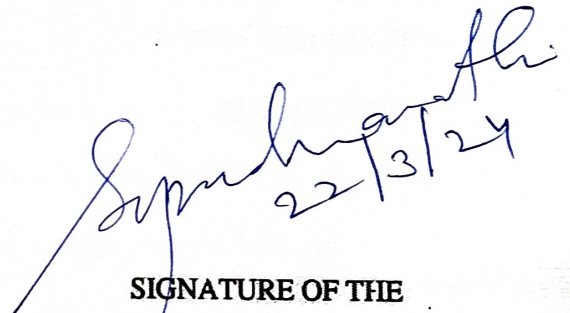
This to certify that the project entitled, **"A STUDY ON COMPUTATIONAL METHOD FOR COMBINATORIAL GEOMETRIC SERIES"** submitted by **T. PRIYADHARSHINI (2022MSCM29)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22.03.2024

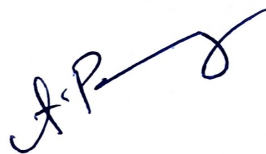


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HEAD OF THE DEPARTMENT**

Dr. A. Paulin Mary
Associate Professor & Head
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Madurai - 625 018

DECLARATION

I, **T. PRIYADHARSHINI (2022MSCM29)** do hereby declare that this Project is a bonafide record of work carried out by me under the guidance and supervision of **Dr. V. VANITHA M.Sc., M.Phil., B.Ed., ACIM., SET., Ph.D.**, Assistant Professor Department of Mathematics, Fatima College, Madurai affiliated to Madurai Kamaraj University, Madurai in partial fulfillment for the award of degree of **Master of Science in Mathematics**.

Place: Madurai-18

T. Priyadharshini
T. PRIYADHARSHINI

Date: 22.03.2024

2022MSCM29

A STUDY ON DIRECTED FUZZY GRAPH COLORING

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
fulfillment of the requirements for award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

Submitted by

M.PRIYANKA

2022MSCM30

Under the Guidance of

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FATIMA COLLEGE (AUTONOMOUS)

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Mary Land, Madurai – 625018, Tamil Nadu

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Dr .K. AMUTHA, M.Sc., M.Phil., B.Ed., Ph.D.


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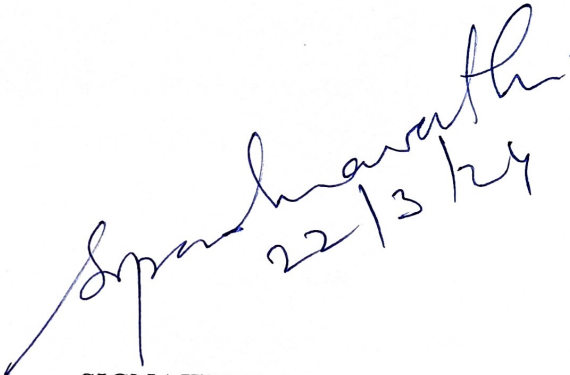
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This to certify that the project entitled, “**A STUDY ON DIRECTED FUZZY GRAPH COLORING**” submitted by **M PRIYANKA (2022MSCM30)** for the award of degree of Master of Science in Mathematics is a bonafied record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22-03-2024


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DECLARATION

I, **M PRIYANKA (2022MSCM30)** do hereby declare that this dissertation is a bonafide record of work carried out by me under the guidance and supervision of **Dr .K. AMUTHA, M.Sc., M.Phil., B.Ed., Ph.D.**, Assistant Professor, Department of Mathematics, Fatima College, Madurai affiliated to Madurai Kamaraj University, Madurai in partial fulfillment for the award of degree of **Master of Science in Mathematics**.

Place: Madurai

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M. Priyanka.

M PRIYANKA

2022MSCM30

A STUDY ON SPECTRAL GRAPH THEORY AND A SURVEY ON IMAGE SEGMENTATION

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
fulfillment of the requirements for award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

J. DIVYA TERESA

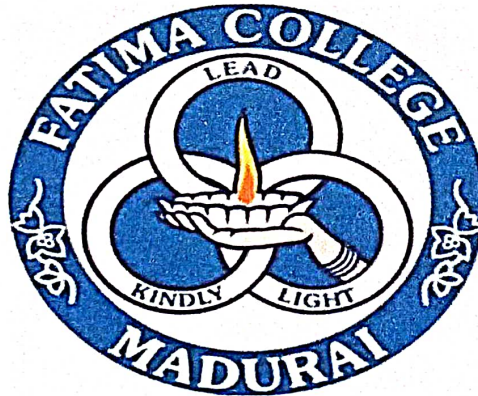
2022MSCM08

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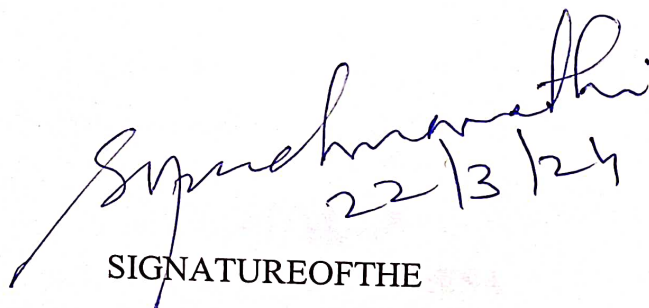
This to certify that the project entitled, "**A STUDY ON SPECTRAL GRAPH THEORY AND A SURVEY ON IMAGE SEGMENTATION**" submitted by **J. DIVYA TERESA (2022MSCM08)** for the award of the degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

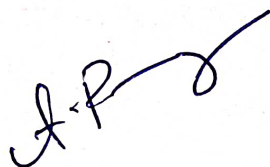
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DECLARATION

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Place: Madurai

Date: 22.03.2024


J. DIVYA TERESA

2022MSCM08

A STUDY ON TOPOLOGICAL INDICES OF OCTA GRAPHENE

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
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Submitted by

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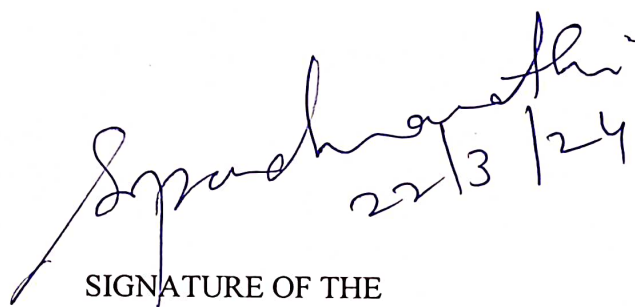
This to certify that the project entitled, "A STUDY ON TOPOLOGICAL INDICES OF OCTA GRAPHENE" submitted by A. JASMINE (2022MSCM16) for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22.03.2024



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Place: Madurai

Date: 22 . 03 . 2024

A. Jasmine .
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A STUDY ON GRAPH ENERGY OF AMENTOFLAVONE

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
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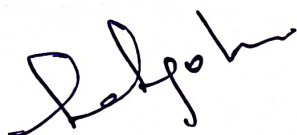
Madurai - 625018.

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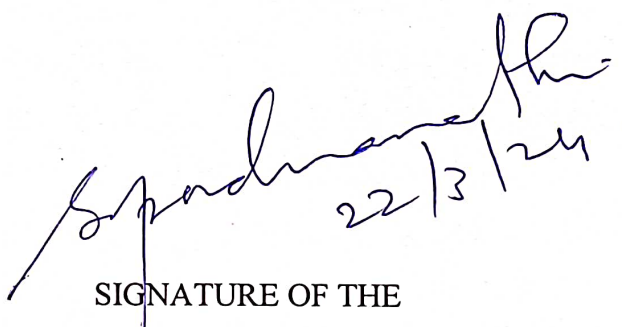
This to certify that the project entitled, “ A STUDY ON GRAPH ENERGY OF AMENTOFLAVONE” submitted by M. J. JENIFAR (2022MSCM18) for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22/03/2024



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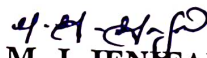
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I, **M. J. JENIFAR (2022MSCM18)** do hereby declare that this dissertation is a bonafide record of work carried out by me under the guidance and supervision of **Dr. E. HELENA M.Sc., M.Phil., Ph.D., PGDCA**, Department of Mathematics, Fatima College, Madurai affiliated to Madurai Kamaraj University, Madurai in partial fulfillment for the award of degree of **Master of Science in Mathematics**.

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M. J. JENIFAR
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A STUDY ON GRAPH ENERGY OF DOPAMINE

A project work submitted to
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MASTER OF SCIENCE IN MATHEMATICS

Submitted by

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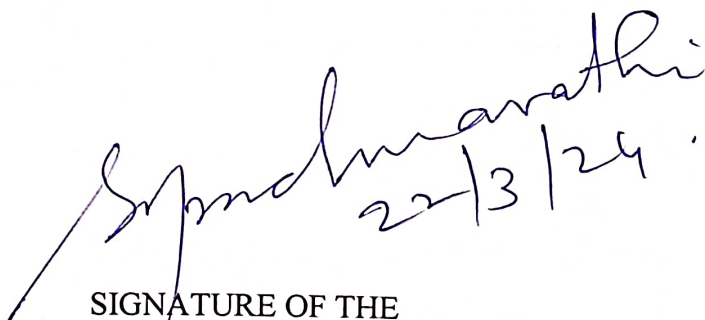
This to certify that the project entitled, "A STUDY ON GRAPH ENERGY OF DOPAMINE" submitted by R. JENIFERRANI (2022MSCM19) for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

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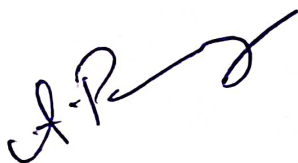
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Place: Madurai
Date: 22.4.2024

R. Jenifer Parip.
R. JENIFERRANI
2022MSCM19

A STUDY ON APPLICATIONS OF CYCLIC GROUPS IN CRYPTOGRAPHY

A project work submitted to
MADURAI KAMARAJ UNIVERSITY
in partial fulfillment of the requirements for award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

Submitted by

V. Karunya

2022MSCM21

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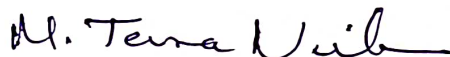
Madurai-625018.

CERTIFICATE

This to certify that the project entitled, "A STUDY ON APPLICATIONS OF CYCLIC GROUPS IN CRYPTOGRAPHY" submitted by **V.KARUNYA (2022MSCM21)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

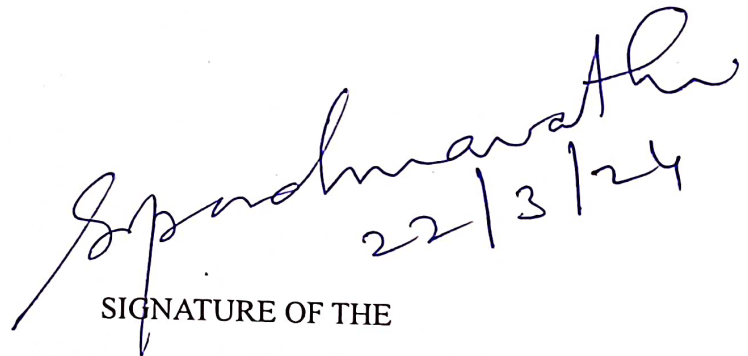
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Date: 22.03.2024



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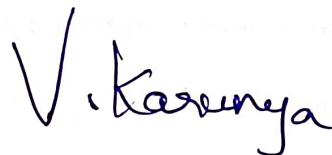
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Place: Madurai

Date: 22.03.2024



V. KARUNYA

2022MSCM21

**A STUDY ON CONTINUOUS MONOTONIC DECOMPOSITION OF
GRAPHS**

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
fulfillment of the requirements for award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

R. LAKSHMI PRIYA

2022MSCM22

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Mrs. M. TERESA NIRMALA M.Sc., M.Phil., (Ph.D.)


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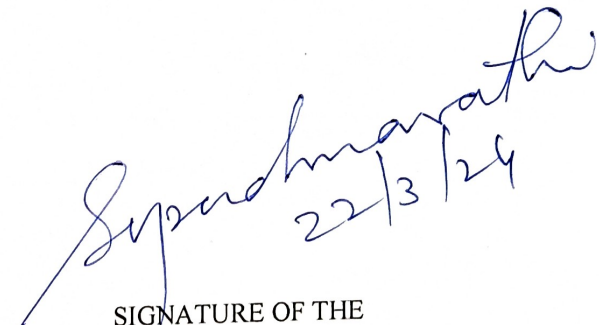
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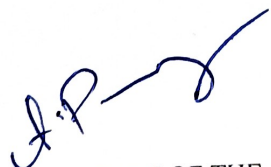
This to certify that the project entitled, "**A STUDY ON CONTINUOUS MONOTONIC DECOMPOSITION OF GRAPHS**" submitted by **R. LAKSHMI PRIYA (2022MSCM22)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22.3.2024


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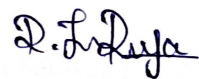
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Place: Madurai

Date: 22, 3, 2024



R. LAKSHMI PRIYA

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A STUDY ON DISTANCE MAGIC GRAPH

A project work submitted to
MADURAI KAMARAJ UNIVERSITY
in partial fulfillment of the
requirements for award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

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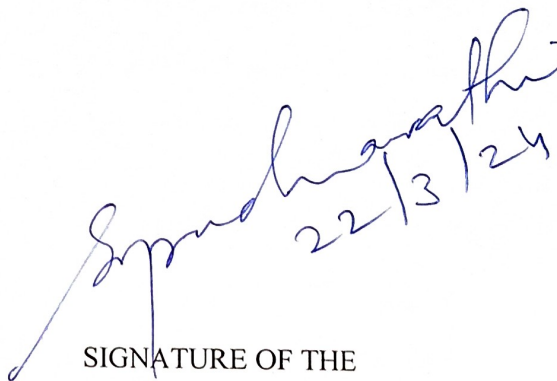
This to certify that the project entitled, "A STUDY ON DISTANCE MAGIC GRAPH" submitted by S. MUTHU PRIYA (2022MSCM26) for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22.03.2024.



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Madurai - 625 018

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Place: Madurai

Date: 22.03.24

S. Muthu Priya

S. MUTHU PRIYA

2022MSCM26

**STUDY ON SOLUTION OF THE DECISION MAKING
PROBLEMS USING FUZZY SOFT RELATIONS**

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
fulfillment of the requirement for award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

Submitted by

B. PUNITHA CATHERINE HILDA

2022MSCM31

Under the Guidance of

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Assistant Professor

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Mary Land, MADURAI -625018, Tamil Nadu

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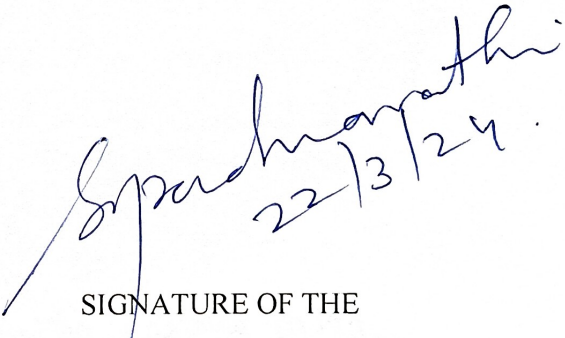
CERTIFICATE


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Place: Madurai

Date: **22.03.2024**


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Place: Madurai

Date: 22.03.2024

B. Punitha Catherine Hilda.

B. PUNITHA CATHERINE HILDA

2022MSCM31

GRACEFUL LABELING OF SOME GRAPHS
(PENTAGONAL, HEXAGONAL, POLYGONAL)

A project work submitted to MADURAI KAMARAJ UNIVERSITY
in partial fulfilment of the requirements for award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

Submitted by

G. SAHAYA PRINCY

2022MSCM32

Under the Guidance of

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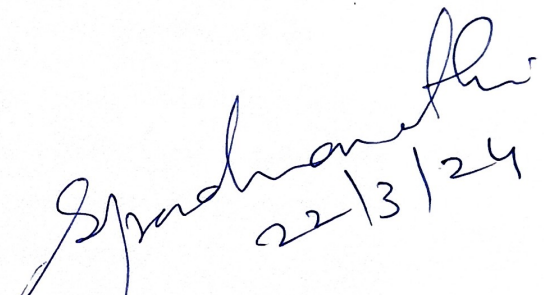
Place: Madurai

Date: 22.03.2024




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Master of Science in Mathematics.

Place: Madurai

Date: 22.03.2024



G. SAHAYAPRINCY

2022MSCM32

A STUDY ON FUZZY HYPERGRAPH

A project work submitted to
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for award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

SARA ALAGANANDAM

2022MSCM33

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March 2024

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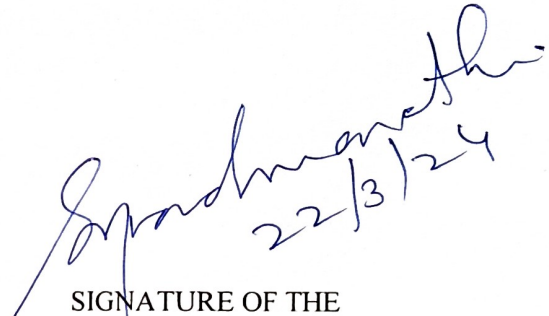
CERTIFICATE


This to certify that the project entitled, **"A STUDY ON FUZZY HYPERGRAPH "** submitted by **SARA ALAGANANDAM (2022MSCM33)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22-03-2024


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Dr. A. Paulin Mary
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SARA ALAGANANDAM

2022MSCM33

A STUDY ON FRACTALS

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
fulfillment of the requirements for award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

T. SEEMA

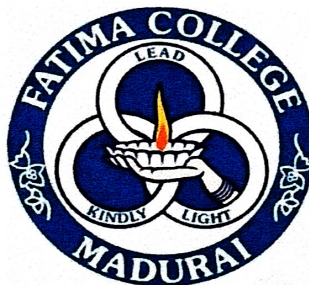
2022MSCM35

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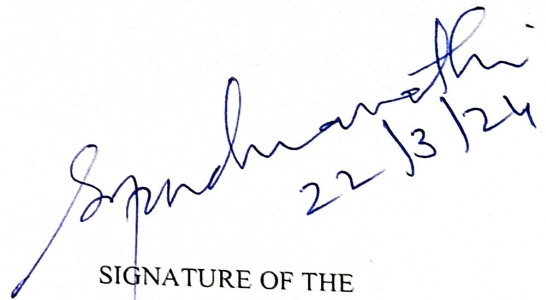
This to certify that the project entitled, **"A STUDY ON FRACTALS"** submitted by **T. SEEMA (2022MSCM35)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

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Date: 22.03.2024

T. Seema.

T. SEEMA

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A STUDY ON FUZZY GRAPH STRUCTURES

A project work submitted to
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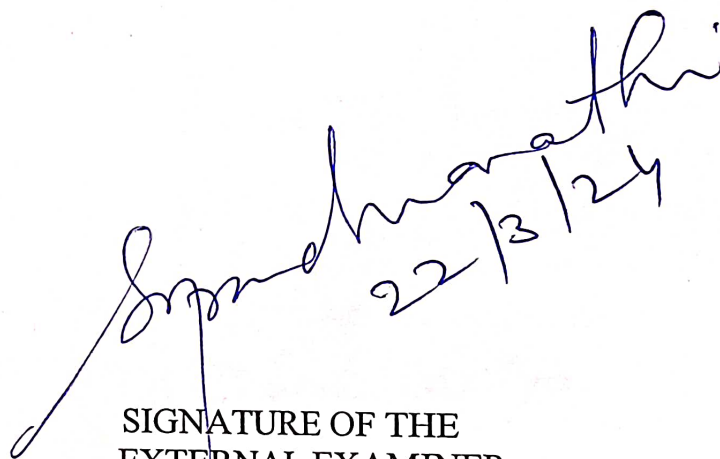
This to certify that the project entitled, “A STUDY ON FUZZY GRAPH STRUCTURES” submitted by **A. SHANMUGAPRIYA (2022MSCM36)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

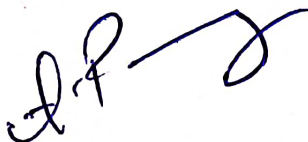
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A. Shanmugapriya

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A. SHANMUGAPRIYA

Date: 22.03.2024

2022MSCM36

STUDY ON DIFFERENT FUZZY NUMBERS AND THEIR VARIOUS DEFUZZIFICATION METHODS

A project work submitted to

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S.SUBALAKSHMI

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A STUDY ON IRREGULAR BIPOLAR FUZZY GRAPHS

A project work submitted to
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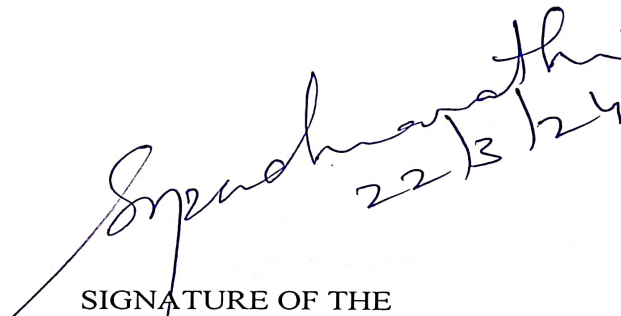
CERTIFICATE

This to certify that the project entitled, "**A STUDY ON IRRUGULAR BIPOLAR FUZZY GRAPH**" submitted by **P.SUROMIYA (2022MSCM41)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22.03.2024


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A STUDY ON DECISION TREES AND ITS TYPES

A project work submitted to
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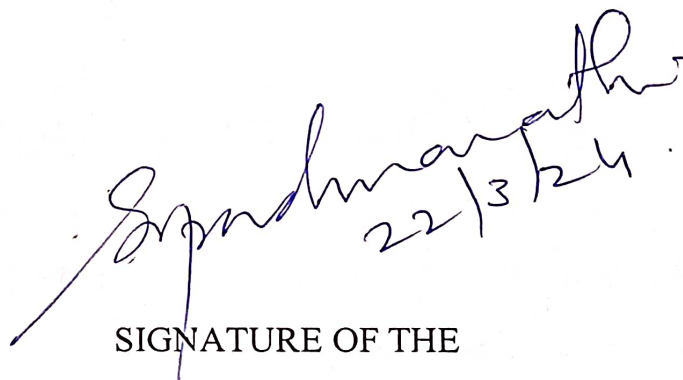
Place: Madurai

Date: 22/03/2024



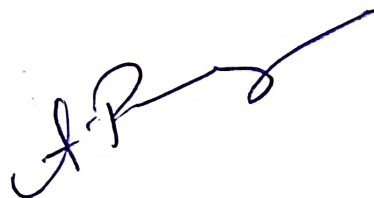
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PYTHAGOREAN FUZZY GRAPHS AND DIGRAPH WITH APPLICATION

A project work submitted to
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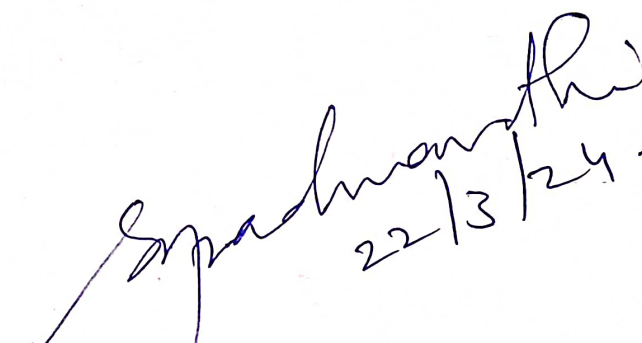
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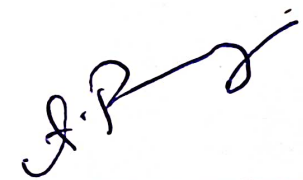
This to certify that the project entitled, **“PYTHAGOREAN FUZZY GRAPHS AND DIGRAPH WITH APPLICATION”** submitted by **M.SOWMIYA (2022MSCM37)** for the award of degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

Place: Madurai

Date: 22.03.2024


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M.SOWMIYA

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Date: 29.03.2024

A STUDY ON FUZZY GRAPH

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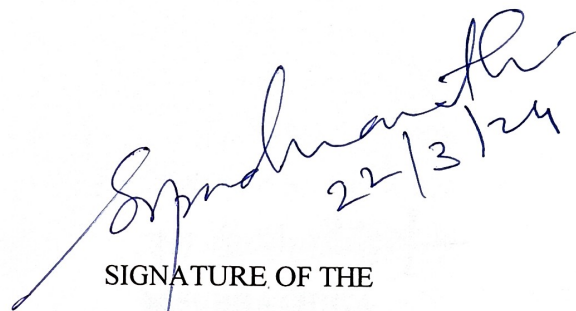
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M.SUBHATHIGA

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**“NUMERICAL METHODS OF SOLVING ORDINARY
DIFFERENTIAL EQUATIONS”**

A project work submitted to
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MASTER OF SCIENCE IN MATHEMATICS

Submitted by

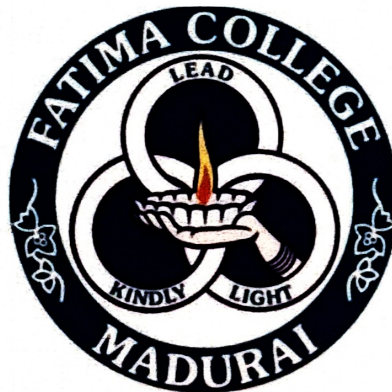
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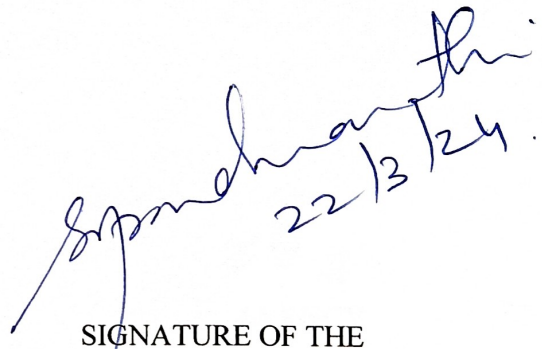
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Place: Madurai

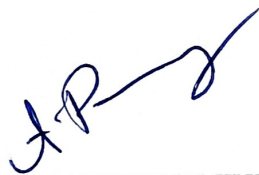
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J.VENCY

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A STUDY ON UNIQUE γ – SET IN TEXT ENCRYPTION

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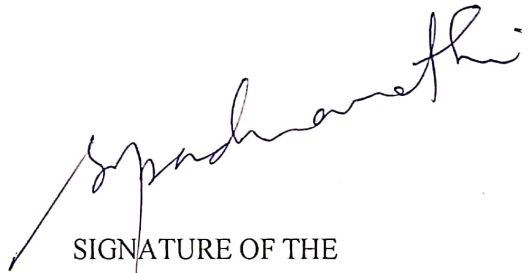
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Place: Madurai

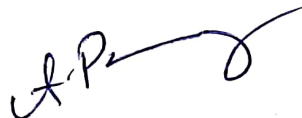
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Place: Madurai

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P. B. Harshana
P.B. HARSHANA

2022MSCM10



A STUDY ON DATA ENCRYPTION AND DECRYPTION USING GRAPH DOMINATION

A project work submitted to
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fulfillment of the requirements for award of the degree
of
MASTER OF SCIENCE IN MATHEMATICS

Submitted by

K. HARSHINI

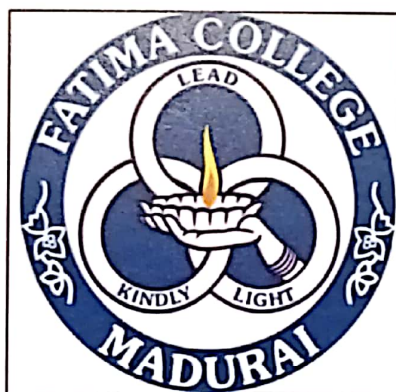
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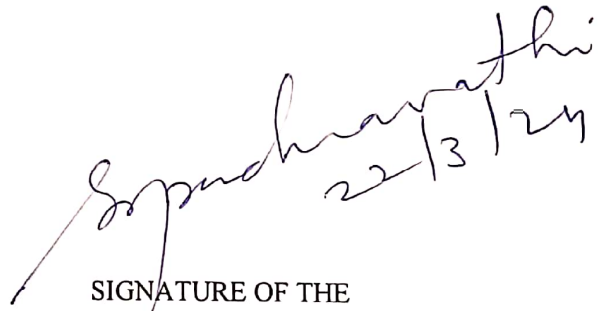
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Place: Madurai

Date: 22.03.2024



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Date: 21.03.2024

K. Harshini

K. HARSHINI

2022MSCM11



A STUDY ON CHEMICAL ENCRYPTION

A project work submitted to
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for award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

Submitted by

P. HELINA

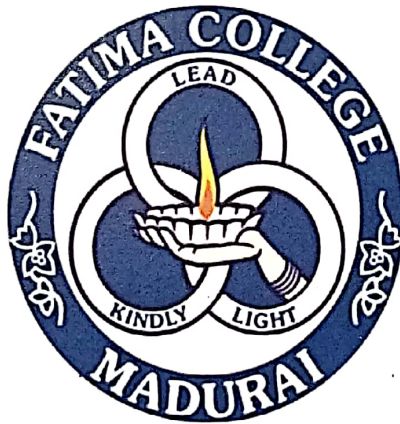
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submitted by **P. HELINA (2022MSCM13)** for the award of degree of Master of Science
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Place: Madurai

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DECLARATION

I, **P. HELINA (2022MSCM13)** do hereby declare that this dissertation is a bonafide record of work carried out by me under the guidance and supervision of **Dr. C. PRASANNA DEVI, M.Sc., M.Phil., Ph.D**, Assistant Professor, Department of Mathematics, Fatima College, Madurai affiliated to Madurai Kamaraj University, Madurai in partial fulfillment for the award of degree of **Master of Science in Mathematics**.

Place: Madurai

Date: 22.03.2024



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A STUDY ON DATA TRANSFER USING BIPARTITE GRAPHS

A project work submitted to
MADURAI KAMARAJ UNIVERSITY in partial
fulfillment of the requirements for award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

R. INIYA

2022MSCM14

Under the Guidance of

Dr. C. PRASANNA DEVI M.Sc., M.Phil., Ph.D.

Assistant Professor

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FATIMA COLLEGE (AUTONOMOUS)

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CERTIFICATE

This to certify that the project entitled, "**A STUDY ON DATA TRANSFER USING BIPARTITE GRAPH**" submitted by **R. INIYA (2022MSCM14)** for the award of the degree of Master of Science in Mathematics is a bonafide record of work carried out by her under my guidance and supervision.

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Date: 22.03.2024

C. P. 2.

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