## A STUDY ON GENERALISED CLOSED SETS IN TOPOLOGICAL SPACES

A Dissertation submitted to

## ST. MARY'S COLLEGE (AUTONOMUS)

### Thoothukudi-628001

affiliated to

## MANONMANIAM SUNDARANAR UNIVERSITY

in partial fulfilment of the requirements

for the award of the Degree of

## MASTER OF PHILOSOPHY IN MATHEMATICS

By

J. HARLIN JEBASEELI

(REG. No. 18MLMT01)



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**JUNE-2019** 

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partial fulfilment for the award of the degree of Master of Philosophy in Mathematics is

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I am extremely grateful to the **Lord Almighty** for His guidance, grace in completing this project successfully during the year 2018 – 2019.

I express my gratitude to **Dr. Sr. Lucia Rose M.Sc., M.Phil., PGDCA., Ph.D.,** the Principal of St. Mary's College (Autonomous), Thoothukudi and the institution for encouraging a research oriented study. I thank my institution for the values I received and the knowledge I acquired in the course of study.

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## A STUDY ON TYPES OF DIFFERENCE LABELING OF GRAPHS

A Dissertation submitted to

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I hereby declare that the dissertation entitled "A STUDY ON TYPES

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I am extremely grateful to the **Lord Almighty** for His guidance, grace in completing this project successfully during the year 2018 - 2019.

I express my gratitude to **Dr. Sr. Lucia Rose M.Sc., M.Phil., PGDCA., Ph.D.,** the Principal of St. Mary's College (Autonomous), Thoothukudi and the institution for encouraging a research oriented study. I thank my institution for the values I received and the knowledge I acquired in the course of study.

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# CUBE ROOT CUBE MEAN LABELING AND ROOT CUBE MEAN LABELING OF CERTAIN GRAPHS

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My special devotion is to **Mother Mary** who is the patron saint of our Marian family. I am extremely grateful to the **Lord Almighty** for His guidance, grace in completing this project successfully during the year 2018 - 2019.

I express my deep sense of gratitude to **Rev. Dr. Sr. Lucia Rose M.Sc.,**M.Phil., PGDCA., Ph.D., The Principal, St. Mary's College (Autonomous),

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I thank all the faculty of Department of Mathematics for providing us very good learning experience and academic ambience.

I am deeply grateful to my guide, **Dr. Sr. S. Kulandai Therese M.Sc.**, **B.Ed.**, **M.Phil.**, **Ph.D.**, for her untiring help, academic guidance and encouragement in the successful completion of this thesis.

I am indebted to my family for the great comforts I enjoy and the good education they have provided me. I also thank them for their trust, moral support and benevolence.

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## A STUDY ON DOMINATION IN GRAPHS

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I am extremely grateful to the **Lord Almighty** for His guidance, grace in completing this project successfully during the year 2018 – 2019.

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I am deeply grateful to my guide, Dr. V.L. Stella Arputha Mary M.Sc., M.Phil., Ph.D., for her untiring help, academic guidance and encouragement in the successful completion of this thesis.

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## A STUDY ON TRI TOPOLOGICAL SPACE

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## A STUDY ON NEW TYPE OF GENERALIZED CLOSED SET IN TOPOLOGICAL SPACE

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## **TOPICS**

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