

**A STUDY ON WIENER INDEX FOR CARTESIAN PRODUCT OF SOME
GRAPHS**

Dissertation submitted to the

**KONGUNADU ARTS AND SCIENCE COLLEGE
(AUTONOMOUS)**

Affiliated to **BHARATHIAR UNIVERSITY** in partial fulfillment of

the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted by

Ms. V. DEEPIKA

(Reg. No: 212MA001)

Under the guidance of

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DEPARTMENT OF MATHEMATICS

**KONGUNADU ARTS AND SCIENCE COLLEGE
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College of Excellence awarded by UGC

31st Rank Among Colleges in NIRF 2022

COIMBATORE - 641 029

APRIL 2023

TOPOLOGICAL DATA ANALYSIS FOR CANCER RESEARCH

Dissertation submitted to

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

affiliated to the Bharathiar University

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

MASTER OF SCIENCE IN MATHEMATICS

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COIMBATORE - 641 029

APRIL 2023

**A STUDY ON GRUNDY COLORING OF SOME GRAPHS USING
MYCIELSKIAN AND CORONA PRODUCT OPERATIONS**

Dissertation submitted to

KONGUNADU ARTS AND SCIENCE COLLEGE

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APRIL 2023

***b*-COLORING ON MODULAR PRODUCT OF SOME GRAPHS**

Dissertation submitted to

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COIMBATORE - 641 029

APRIL 2023

**DETECTION AND CLASSIFICATION OF PLANT LEAF DISEASES USING
MATLAB**

Dissertation submitted to

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APRIL 2023

**A STUDY ON ALPHA GENERALIZED PRE-CLOSED SETS IN
TOPOLOGICAL SPACES**

Dissertation submitted to the
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COIMBATORE - 641 029

APRIL 2023

A STUDY ON GENERALIZED FUZZY TOPOLOGICAL SPACES

Dissertation submitted to

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APRIL 2023

**A STUDY ON GENERALIZED PRE $b^{\#}$ - CLOSED SETS IN TOPOLOGICAL
SPACES**

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

**STUDY ON EXISTENCE OF SOLUTIONS TO NEUTRAL DIFFERENTIAL
EQUATIONS WITH DEVIATED ARGUMENTS**

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

A STUDY ON GRUNDY COLORING OF VARIOUS GRAPHS

Dissertation submitted to the
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COIMBATORE - 641 029

APRIL 2023

PROPERTIES OF $S\hat{G}$ CLOSED SETS IN TOPOLOGICAL SPACES

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

ON RAINBOW ANTIMAGIC COLORING OF
SHELL GRAPH, HELM GRAPH AND CLOSED HELM GRAPH

Dissertation submitted to

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APRIL 2023

ON RAINBOW ANTIMAGIC COLORING OF
SUNLET GRAPH, PAN GRAPH AND BUTTERFLY GRAPH

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

WEB APPLICATION DEVELOPMENT FOR STATISTICAL METHODS

Dissertation submitted to

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COIMBATORE-641 029

APRIL 2023

**REVIEW ON AUTOMATIC SEGMENTATION OF FIBER CROSS SECTIONS
BY DUAL THRESHOLDING**

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

**A STUDY ON SOME NANO GENERALIZED
CLOSED SETS IN NANO TOPOLOGICAL SPACES**

Dissertation submitted to

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APRIL 2023

**A STUDY ON SEMI-GENERALIZED SETS AND ITS FUNCTIONS
IN TOPOLOGICAL SPACES**

Dissertation submitted to the
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APRIL 2023

**A STUDY ON GENERALIZED $\omega\alpha$ -CLOSED SETS IN
TOPOLOGICAL SPACES**

Dissertation submitted to the
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COIMBATORE - 641 029

APRIL 2023

**STUDY ON EXISTENCE RESULTS FOR NONLINEAR ABSTRACT
NEUTRAL DIFFERENTIAL EQUATIONS WITH TIME VARYING DELAYS**

Dissertation submitted to

**KONGUNADU ARTS AND SCIENCE COLLEGE
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COIMBATORE 641 029

APRIL 2023

**A STUDY ON ACYCLIC COLORING FOR DEGREE SPLITTING
GRAPHS AND MYCIELSKI GRAPHS**

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

**ANALYSING THE SHARE VALUE OF THE BRITANNIA INDUSTRIES
PUBLIC LIMITED USING STATISTICAL TOOLS**

Dissertation submitted to

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COIMBATORE-641 029

APRIL 2023

A STUDY ON $\hat{g}$ *-CLOSED SETS IN TOPOLOGICAL SPACES

Dissertation submitted to

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

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

MASTER OF SCIENCE IN MATHEMATICS

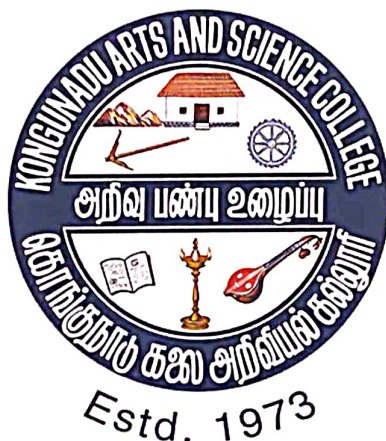
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COIMBATORE-641 029

APRIL 2023

**A STUDY ON STAR COLORING OF SPLITTING GRAPHS AND
EXTENDED DUPLICATE GRAPH**

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

**A STUDY ON MICRO ALPHA CONTINUOUS FUNCTIONS IN MICRO
TOPOLOGICAL SPACES**

Dissertation submitted to

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COIMBATORE-641 029

APRIL 2023

**STUDY ON EXISTENCE OF SOLUTIONS OF IMPULSIVE NONLINEAR
FUNCTIONAL NEUTRAL INTEGRO-DIFFERENTIAL EQUATIONS WITH
NONLOCAL CONDITION**

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

**A STUDY ON MICRO GENERALIZED
IRRESOLUTE FUNCTIONS IN MICRO
TOPOLOGICAL SPACES**

Dissertation submitted to
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COIMBATORE 641 029

APRIL 2023

STUDENTS' CAREER SURVEY USING STATISTICAL METHODS

Dissertation submitted to

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COIMBATORE-641 029

APRIL 2023

A STUDY ON gr^* CLOSED AND OPEN SETS

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

**REVIEW ON HANDWRITTEN SIGNATURE VERIFICATION USING
NEURAL NETWORK**

Dissertation submitted to

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APRIL 2023

INDIAN CRICKET TEAM SELECTION USING OPERATION RESEARCH

Dissertation submitted to

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APRIL 2023

GRUNDY COLORING ON DEGREE SPLITTING GRAPH
AND SPLITTING GRAPH

Dissertation submitted to

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COIMBATORE 641 029

APRIL 2023

A STUDY ON t-TONE k-COLORING OF CYCLE AND PATH

Dissertation submitted to

KONGUNADU ARTS AND SCIENCE COLLEGE
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DEPARTMENT OF MATHEMATICS
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(AUTONOMOUS)

College of Excellence (UGC)

Re -Accredited by NAAC with A+ grade (4th Cycle)

31st Rank among Colleges in NIRF 2022

COIMBATORE - 641 029

APRIL 2023

A STUDY ON g^* CLOSED SETS

Dissertation submitted to

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

affiliated to the Bharathiar University

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

MASTER OF SCIENCE IN MATHEMATICS

submitted by

Ms. B. KAVIPRIYA B.Sc.,

(212MA037)

Under the guidance of

Dr. L. VIDYA RANI MSc., M.Phil., Ph.D.,(SET), PGDCA



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A STUDY ON FORGOTTEN INDEX FOR
TENSOR PRODUCT OF SOME GRAPHS

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**A STUDY ON GENERALIZED STAR SEMI
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