

St. JOHN'S COLLEGE OF ARTS & SCIENCE

(Accredited with B++ by NAAC & Approved by UGC under section 2(f) & 12(B) status)
(Affiliated to Manonmaniam Sundaranar University, Tirunefvell)
(A Christian Minority Institution)



St. John's College Road, Ammandivilai, Kanyakumari District - 629 204, Tamil Nadu, South India. Visit us at : www.stjohnskk.ac.in

Ph: 04651 200013 | E-mail : Off. stjcas@gmail.com | e-mail Per. : dasappanvy@gmail.com | Mob. 6282239166

PROJECT - MSC MATHEMATICS

A STUDY ON SUM DIVISOR CORODIAL LABELING OF SOME STANDARD GRAPHS

A PROJECT

Submitted by

S. SAHAYA RASHMI JINI

Reg No: 20223222515215

In Partial Fulfilment for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS



DEPARTMENT OF MATHEMATICS

ST. JOHN'S COLLEGE OF ARTS AND SCIENCE

AMMANDIVIAL – 629204

MAY - 2024

ST. JOHN'S COLLEGE OF ARTS AND SCIENCE AMMANDIVIAL - 629204

BONAFIDE CERTIFICATE

Certified that this dissertation titled "A STUDY ON SUM DIVISOR CORODIAL LABELING OF SOME STANDARD GRAPHS" is the bonafide work of S. SAHAYA RASHMI JINI (Reg. No: 20223222515215) who carried out the work my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr. S. Elizabeth Bernie, MSc., Mphil., B.Ed., Ph.D.

Assistant Professor and Head,

Department of Mathematics.

St. John's College of Arts and Science

Ammandivilai- 629204

Signature of the Supervisor with Date

Dr. G. ISHIYA MANJI, M.Sc., M.Phil., Ph.D.

Assistant Professor,

Department of Mathematics.

St. John's College of Arts and Science

Ammandivilai- 629204.

A STUDY OF b-COLORING OF SOME GRAPHS

A PROJECT

Submitted by

ANUSHA. G

Reg No: 20223222515203

In Partial Fulfilment for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS



DEPARTMENT OF MATHEMATICS
ST. JOHN'S COLLEGE OF ARTS AND SCIENCE
AMMANDIVIAL - 629204
MAY - 2024

ST. JOHN'S COLLEGE OF ARTS AND SCIENCE AMMANDIVILAI – 629204

BONAFIDE CERTIFICATE

Certified that this dissertation titled "A STUDY OF b-COLORING OF SOME

GRAPHS" is the bonafide work of ANUSHA. G (Reg. No: 20223222515203) who

carried out the work my supervision. Certified further that to the best of my knowledge the

work reported herein does not form part of any other dissertation on the basis of which a

degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr. S. Elizabeth Bernie, M.Sc., M.phii., B.Ed., Ph.D.

Assistant Professor and Head,

Department of Mathematics,

St. John's College of Arts and Science

Ammandivilai - 629204.

Signature of the Supervisior with Date

Dr. L. T. Cherin Monish Femila, M.Sc., M.phil., Ph.D.

Assistant Professor,

Department of Mathematics,

St. John's College of Arts and Science

Ammandivilai - 629204.

A STUDY ON DISTANCE MATRIX OF A GRAPH

A PROJECT

Submitted by

M.V.ARUNISHA

Reg No: 20223222515204

In Partial Fulfilment for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS



DEPARTMENT OF MATHEMATICS
ST. JOHN'S COLLEGE OF ARTS AND SCIENCE
AMMANDIVIAI - 629204
MAY - 2024

ST. JOHN'S COLLEGE OF ARTS AND SCIENCE AMMANDIVIAI - 629204

BONAFIDE CERTIFICATE

Certified that this dissertation titled "A STUDY ON DISTANCE MATRIX OF A GRAPH" is the bonafide work of M.V.ARUNISHA (Reg. No: 20223222515204) who carried out the work my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr. S.Elizabeth Bernie, MSc., M.phil., B.Ed., Ph.D.

Assistant Professor and Head,

Department of Mathematics,

St. John's College of Arts and Science

Ammandivilai- 629204.

Signature of the Supervisor with Date

Dr. S. Ancy Mary, MSc., M.phil., B.Ed., Ph.D.

Assistant Professor,

Department of Mathematics,

St. John's College of Arts and Science

Ammandivilai- 629204.

A STUDY ON PERFECT MATCHING FOR SOME GRAPHS

A PROJECT

Submitted by

J.ASHMITHA

Reg No: 20223222515205

In Partial Fulfilment for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS



DEPARTMENT OF MATHEMATICS
ST. JOHN'S COLLEGE OF ARTS AND SCIENCE
AMMANDIVIAI – 629204
MAY - 2024

ST. JOHN'S COLLEGE OF ARTS AND SCIENCE

AMMANDIVILAI - 629 204

BONAFIDE CERTIFICATE

Certified that this dissertation titled "PERFECT MATCHING FOR SOME GRAPHS" is the bonafide work of J.ASHMITHA (Reg. No: 20223222515205) who carried out the work my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with date

Dr. S. Elizabeth Bernie, M.Sc., M.Phil, B.Ed., Ph.D.

Assistant professor and Head,

Department of Mathematics,

ST. John's college of arts and

Science, Ammandivilai - 629 204

Line of caloslan

Signature of the supervisor with date

Dr. J. Jeba lisa, M.sc., M.Phil., Ph.D.

Assistant professor,

Department of Mathematics,

ST. John's college of arts and

Science, Ammandivilai - 629 204.

A STUDY ON THE MINIMAL DOMINATING GRAPH

A PROJECT

Submitted by

R. Belvini

Reg No: 20223222515206

In Partial Fulfilment for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS



DEPARTMENT OF MATHEMATICS

ST. JOHN'S COLLEGE OF ARTS AND SCIENCE

AMMANDIVIAI – 629204

MAY - 2024

ST. JOHN'S COLLEGE OF ARTS AND SCIENCE AMMANDIVIAL – 629204

BONAFIDE CERTIFICATE

Certified that this dissertation titled "A STUDY ON THE MINIMAL DOMINATING GRAPH" is the bonafide work of R. Belvini (Reg. No: 20223222515206) who carried out the work my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr. S. Elizabeth Bernie, M.Sc., M.Phil., B.Ed., Ph.D.

Assistant Professor and Head.

Department of Mathematics,

St. John's College of Arts and Science

Ammandivilai - 629204.

S. Show March Je 1 st 2024

Signature of the Supervisor with Date

Dr. S. ANCY MARY, M.Sc., M.Phil., B.Ed., Ph.D.

Assistant Professor,

Department of Mathematics,

St. John's College of Arts and Science

Ammandivilai - 629204.



St. JOHN'S COLLEGE OF ARTS & SCIENCE

(Accredited with B++ by NAAC & Approved by UGC under section 2(f) & 12(B) status)

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(A Christian Minority Institution)



St. John's College Road, Ammandivilai, Kanyakumari District - 629 204, Tamil Nadu, South India. Visit us at : www.stjohnskk.ac.in

Ph: 04651 200013 | E-mail: Off.: stjcas@gmail.com | e-mail Per.: desappanyy@gmail.com | Mob. 6282239186

Declaration

I hereby declare that the details and information given above are complete and true to the best of my knowledge and belief.

Dr. V.Y. DASAPPANMA, M.Phil.Ph.D

PRINCIPAL ST. JOHN STUDING OF ARTS & SCIENCE AMMANDIVILAI - 629204 MANYAKIMARI DISTRICT