




ST. JOHN'S
COLLEGE, ANCHAL

Affiliated to the University of Kerala
Re-accredited with A Grade by NAAC
Recognised for STAR College by DBT, Govt. of India

LET YOUR
LIGHT
SHINE BEFORE
MEN

BSc MATHEMATICS

 P.B. No.3,
Mar Gregorios Nagar,
Anchal P.O., Kollam,
Kerala - 691 306

Off: 0475-2966973 | Fax: 0475-2275326 
info@stjohns.ac.in | principal@stjohns.ac.in 
www.stjohns.ac.in 

A STUDY ON LATTICE

Project work carried out for partial fulfilment of the requirement for the
First Degree Programme in Mathematics of

University of Kerala

by

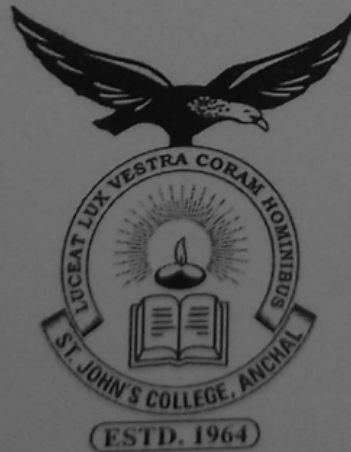
NIMISHA CHANDRAN SR : 220-20138008

AJAY VS : 220-20138014

KAVYA MD :220-20138027

PRINCY MATHEW :220-20138031

RINO P KUNJUMON :220-20138040



Sixth Semester BSc Mathematics, St. John's College Anchal, Kollam

May, 2023

St. John's College, Anchal, Kollam

CERTIFICATE

I hereby certify that this project entitled "A Study on Lattice" is a project work carried out by Nimisha Chandran SR, Ajay VS, Kavya MD, Princy Mathew and Rino P Kunjumon under my supervision in partial fulfillment of the requirement for the First Degree Programme in Mathematics of the University of Kerala and that no part of this work has been submitted for the award of any Degree.

Sibi C Babu
16.05.2023

Dr Sibi C Babu

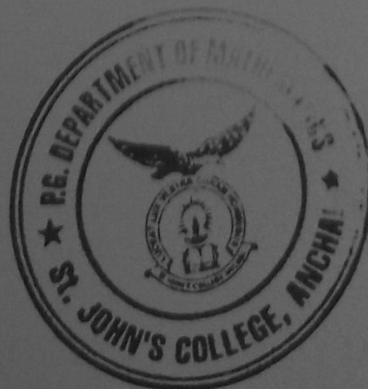
Head of the Department

Department of Mathematics

for *Dr Smitha Mary Mathew*

Dr Smitha Mary Mathew

Supervising Teacher.



A STUDY ON METRIC SPACES

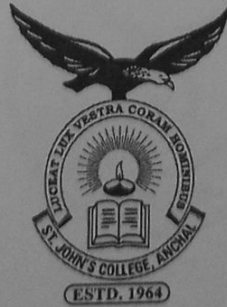
*Project work carried out for partial fulfilment of the requirement for the First Degree
Programme in Mathematics of*



University of Kerala

by

ASWANI ANIL S	:	22020138005
GADHA SATHEESH	:	22020138024
SREELEKSHMI G S	:	22020138034
SURUMI S	:	22020138036
LINZA JOSE	:	22020138028
VINEESHA L	:	22020138039



Sixth Semester BSc Mathematics

St. Johns College, Anchal, Kollam

ST. JOHNS COLLEGE, ANCHAL
KOLLAM

CERTIFICATE


I hereby certify that this project entitled "A STUDY ON METRIC SPACES" is a project work carried out by ASWANI ANIL S, GADHA SATHEESH, SREELEKSHMI G S, SURUMI S, LINZA JOSE, VINEESHA L under my supervision in partial fulfillment of the requirement for the award of the degree of the First Degree Programme in Mathematics of the University of Kerala and that no part of this work has been submitted for the award of any Degree.

Sibi C. Babu
16.05.2023

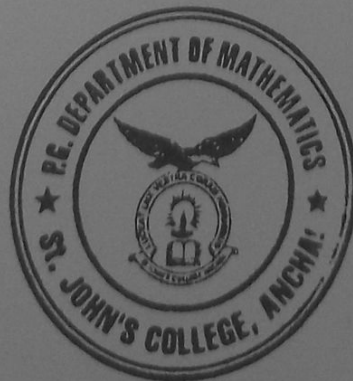
Prof. Sibi C. Babu

Head of the Department.

Department of Mathematics.

for 
TONY PHILIP

Supervising Teacher.



Exploring Benford's Law: Applications and Case Studies

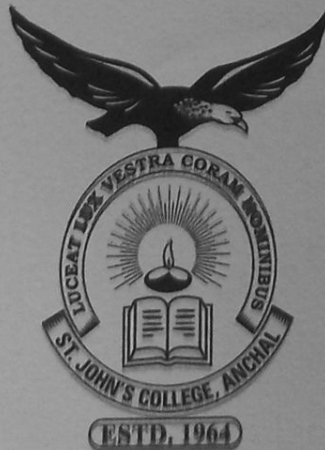
*Project work carried out for partial fulfillment of the requirement for the
First Degree Programme in Mathematics of*



University of Kerala

by

ADITH S.B : 220-20138001
LINY BENNY : 220-20138007
A.P ANANDAN : 220-20138011
AKHIL KRISHNAN R : 220-20138015
JESSIN SUSAN JOBY : 220-20138025
MUHAMMAD ASLAM : 220-20138030



Sixth Semester BSc Mathematics, St. John's College Anchal, Kollam.

May, 2023

St. John's College, Anchal, Kollam

CERTIFICATE

I hereby certify that this project entitled "**Exploring Benford's Law: Applications and Case Studies**" is a project work carried out by Adith S.B, Liny Benny, A.P Anandan, Akhil Krishnan R, Jessin Susan Joby and Muhammad Aslam under my supervision in partial fulfillment of the requirement for the First Degree Programme in Mathematics of the University of Kerala and that no part of this work has been submitted for the award of any Degree.

Dr Sibi C Babu
16-05-2023

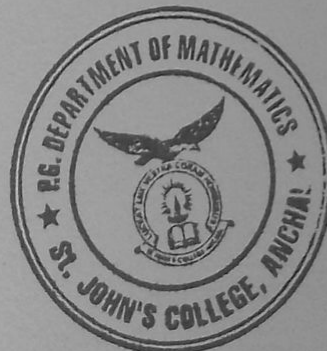
Dr Sibi C Babu

Head of the Department

Department of Mathematics

Dr Dilip D.S
Dr Dilip D.S

Supervising Teacher.



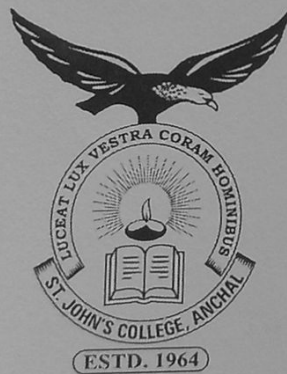
FRACTIONAL CALCULUS

*Project work carried out for partial fulfillment of the requirement for the
First Degree Programme in Mathematics of*

University of Kerala

by

ANANYA ANIL	:	220-20138004
BHAGYA R NAIR	:	220-20138021
BIJITHA KRISHNAN	:	220-20138022
FATHIMA H S	:	220-20138023
STEFFY LUDIYA JACOB	:	220-20138035



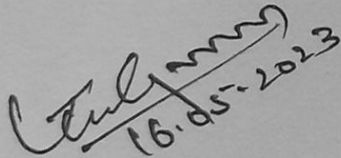
Sixth Semester BSc Mathematics, St. John's College Anchal, Kollam.

May, 2023

St. John's College, Anchal, Kollam

CERTIFICATE

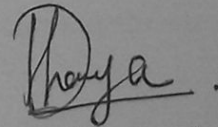
I hereby certify that this project entitled "**Fractional Calculus**" is a project work carried out by Ananya Anil, Bhagya R Nair, Bijitha Krishnan, Fathima H S and Steffy Ludiya Jacob under my supervision in partial fulfillment of the requirement for the First Degree Programme in Mathematics of the University of Kerala and that no part of this work has been submitted for the award of any Degree.


16.05.2023

Dr Sibi C Babu

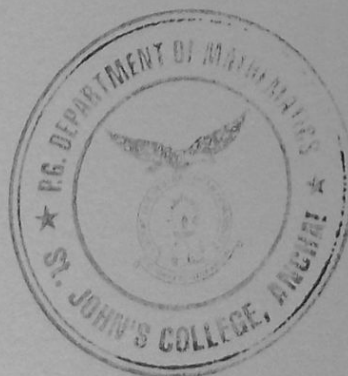
Head of the Department

Department of Mathematics



Dr Dhanya Ramachandran

Supervising Teacher.



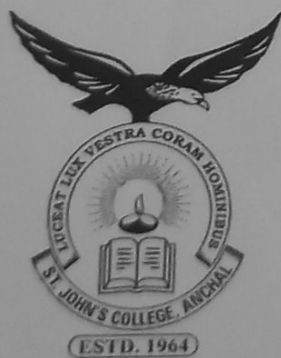
LINEAR PROGRAMMING THEORY AND APPLICATIONS

Project work carried out for partial fulfillment of the requirement for the First Degree Programme in Mathematics of

University of Kerala

by

AKSHARA A.K	:	220-20138002
SREYALEKSHMI G.S	:	220-20138010
KAVYA SANTHOSH	:	220-20138026
LISHA SHAJU	:	220-20138029
SHEEBA RACHEL ZACHARIA	:	220-20138033



Sixth Semester BSc Mathematics, St. John's College Anchal, Kollam.

May, 2023

St. John's College, Anchal, Kollam

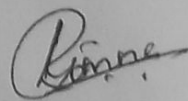
CERTIFICATE

I hereby certify that this project entitled "Linear Programming: Theory and Applications" is a project work carried out by Akshara A.K, Sreyaleskshmi G.S, Kavya Santhosh, Lisha Shaju and Sheeba Rachel Zacharia under my supervision in partial fulfillment of the requirement for the First Degree Programme in Mathematics of the University of Kerala and that no part of this work has been submitted for the award of any Degree.

Dr Sibi C Babu

Head of the Department

Department of Mathematics



Dr Limnaraj B.P

Supervising Teacher.

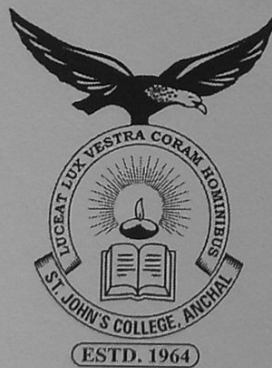
Queuing Theory and its Application

*Project work carried out for partial fulfillment of the requirement for the
First Degree Programme in Mathematics of*

University of Kerala

by

Adithyan.V	:	220-20138013
Arathi.Rajeevan	:	220-20138019
Amrutha.Sreekumar	:	220-20138018
Akshara.G.S	:	220-20138003
VAISHNAVI S	:	220-20138038
Amrutha.Krishna.M.S	:	220-20138017



Sixth Semester BSc Mathematics, St. John's College Anchal, Kollam.

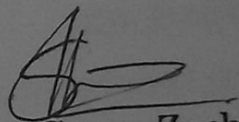
May, 2023

St. John's College, Anchal, Kollam

CERTIFICATE

I hereby certify that this project entitled "Queuing Theory and its Application" is a project work carried out by Adithyan.V, Arathi.Rajeevan, Amrutha Sreekumar, Amrutha .Krishna M.S , Akshara.G.S, and Vaishnavi.S under my supervision in partial fulfillment of the requirement for the First Degree Programme in Mathematics of the University of Kerala and that no part of this work has been submitted for the award of any Degree.

Dr Sibi C Babu
Head of the Department
Department of Mathematics


Dr.Sunitha Grace Zacharia
Assistant Professor
Department of Mathematics

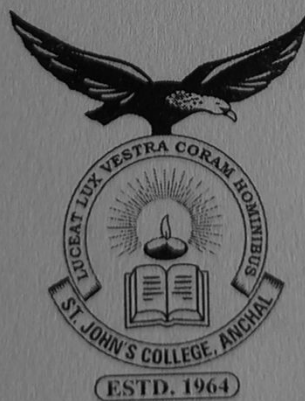
SECOND ORDER DIFFERENTIAL EQUATIONS AND ITS APPLICATIONS

*Project work carried out for partial fulfillment of the requirement for the
First Degree Programme in Mathematics of*

University of Kerala

by

DEVU SUDHI	:	220-20138006
SHINCY L STUVART	:	220-20138009
ASHNA REJI	:	220-20138020
REIHA J R	:	220-20138032
VAISHNAVI R	:	220-20138037



Sixth Semester BSc Mathematics, St. John's College Anchal, Kollam.

May, 2023

St. John's College, Anchal, Kollam

CERTIFICATE

I hereby certify that this project entitled "**Second Order Differential Equations and its Applications**" is a project work carried out by Devu Sudhi, Shincy L Stuvart, Ashna Reji, Reiha J R and Vaishnavi R under my supervision in partial fulfillment of the requirement for the First Degree Programme in Mathematics of the University of Kerala and that no part of this work has been submitted for the award of any Degree.

(Signature)
16.05.2023

Dr Sibi C Babu
Supervising Teacher
Head of the Department
Department of Mathematics

