

**Analysis of Population Growth in India's Most Populated  
states by using Law of Natural Growth**

Project Report submitted  
In partial fulfilment of the requirement for the degree  
of  
**Bachelor of Science in Mathematics**

By  
**Mr. Amit Tanwar**  
(Roll No.:1903110002)

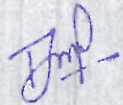
Under the guidance of  
**Dr. Mina Kumari**



**School of Basic and Applied Sciences**

**K. R. MANGALAM UNIVERSITY  
SOHNA ROAD, GURUGRAM**

**June 2022**

  
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Sohna Road, Gurugram, (Haryana)



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## DECLARATION

I hereby declare that the work which is being presented here in entitled "Analysis of Population Growth in India's Most Populated states by using Law of Natural Growth" in partial fulfilment of requirements for the award of the degree of B.Sc. (H) Mathematics submitted in the Department of Mathematics ,School of Basic and Applied science at K. R. Mangalam University, Gurugram , is an authentic record of my own work carried out during a period from April 2021 to March 2022 under the supervision of Dr. Mina Kumari. The matter presented in this report has not been submitted by me (in any form) in any other University / Institute.

Place: Sohna, Gurugram

Date: 9-June-2022

*Amit*

Amit Tanwar  
Roll No: 1903110002  
B.Sc. (H) Mathematics

*Jrf*

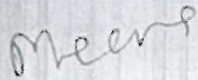
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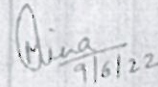
## CERTIFICATE

This is to certify that the project titled "Analysis of Population Growth in India's Most Populated states by using Law of Natural Growth" is an academic work done by "Amit Tanwar" submitted in the partial fulfilment of the requirement for the award of the degree of "Bachelor of Science (H) (Mathematics)" from K.R. Mangalam University, Sohna Road, Gurugram under my guidance and direction. To the best of my knowledge and belief the data and information presented by her in the project has not been submitted earlier elsewhere.

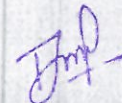
Date: 9/6/22



Prof. (Dr.) Meena Bhandari  
Dean, SBAS  
K.R. Mangalam University  
Sohna Road, Gurugram



Dr. Mina Kumari  
Assistant Professor, SBAS  
K. R. Mangalam University  
Sohna Road, Gurugram



Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



**Comparative Study of Maximization Assignment Model  
by Existing Method and Newly Proposed Methods**

*Project Report submitted*

*In partial fulfilment of the requirement for the degree*

*of*

**Bachelor of Science (Hons.) in Mathematics**

*By*

**Mr. Agnivesh Tiwari**

**(Roll No.:1903110001)**

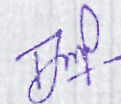
Under the guidance of

**Dr. Yogendra Kumar Rajoria**



**Department of Mathematics  
School of Basic and Applied Sciences  
K. R. MANGALAM UNIVERSITY  
SOHNA ROAD, GURUGRAM 122103**

**June 2022**



**Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)**



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K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## DEDICATION

My work is dedicated to my parents, Mr. Ram Anuj Tiwari and Ms. Poonam Tiwari who encouraged and inspired me in every possible way and created an invisible homely atmosphere around me due to which I never felt myself alone even in my loneliness during my studies.

My dedication won't complete without dedicating it to all my faculties who held my hand thru out my graduation specially my mentor Dr. Yogendra Kumar Rajoria who has been with me from the first day of my degree.



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K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## DECLARATION

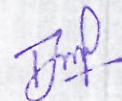
I hereby declare that the work which is being presented here in entitled "Comparative Study of Maximization Assignment Model by Existing Method and Newly Proposed Methods" in partial fulfilment of requirements for the award of the degree of B.Sc. (H) Mathematics submitted in the Department of Mathematics, School of Basic and Applied science at K. R. Mangalam University, Gurugram is an authentic record of my own work carried out during a period from April 2021 to June 2022 under the supervision of Dr. Yogendra Kumar Rajoria. The matter presented in this report has not been submitted by me (in any form) in any other University / Institute.

Place: Sohna, Gurugram

Date: 09/06/2022



Agnivesh Tiwari  
Roll No: 1903110001  
B.Sc. (H) Mathematics



Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



**Comparative Study of Maximization Assignment Model  
by Existing Method and Newly Proposed Methods**

*Project Report submitted*

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**Bachelor of Science (Hons.) in Mathematics**

*By*

**Mr. Agnivesh Tiwari**

**(Roll No.:1903110001)**

Under the guidance of

**Dr. Yogendra Kumar Rajoria**



**Department of Mathematics**

**School of Basic and Applied Sciences**

**K. R. MANGALAM UNIVERSITY**

**SOHNA ROAD, GURUGRAM 122103**

**June 2022**



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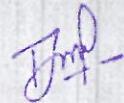
**K.R. Mangalam University**

**Sohna Road, Gurugram, (Haryana)**



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Sohna Road, Gurugram, (Haryana)



## DEDICATION

My work is dedicated to my parents, Mr. Ram Anuj Tiwari and Ms. Poonam Tiwari who encouraged and inspired me in every possible way and created an invisible homely atmosphere around me due to which I never felt myself alone even in my loneliness during my studies.

My dedication won't complete without dedicating it to all my faculties who held my hand thru out my graduation specially my mentor Dr. Yogendra Kumar Rajoria who has been with me from the first day of my degree.



Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## DECLARATION

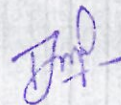
I hereby declare that the work which is being presented here in entitled "Comparative Study of Maximization Assignment Model by Existing Method and Newly Proposed Methods" in partial fulfilment of requirements for the award of the degree of B.Sc. (H) Mathematics submitted in the Department of Mathematics, School of Basic and Applied science at K. R. Mangalam University, Gurugram is an authentic record of my own work carried out during a period from April 2021 to June 2022 under the supervision of Dr. Yogendra Kumar Rajoria. The matter presented in this report has not been submitted by me (in any form) in any other University / Institute.

Place: Sohna, Gurugram

Date: 09/06/2022



Agnivesh Tiwari  
Roll No: 1903110001  
B.Sc. (H) Mathematics



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K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



# INVESTIGATION OF POPULATION GROWTH PROBLEMS BY USING LAPLACE TRANSFORM METHOD

Submitted in the partial fulfillment of the requirements  
for the award of the degree of

BACHELOR OF SCIENCE (HONOURS)  
IN  
MATHEMATICS

by

Dinesh Sangwan  
Roll No. 1803110002

Under the supervision of

Dr. Yogendra Kumar Rajoria



Department of Mathematics  
School of Basic and Applied Science

K. R. MANGALAM UNIVERSITY  
GURGAON SOHNA ROAD  
GURGAON 122103

July, 2021



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Sohna Road, Gurugram, (Haryana)



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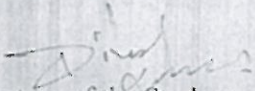
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Sonna Road, Gurugram, (Haryana)



### CANDIDATE'S DECLARATION

I hereby declare that the work which is being presented here entitled, " *Investigation of Population Growth Problems by Using Laplace Transform Method*" by: Dinesh Sangwan in partial fulfillment of requirements for the award of the degree of Bachelor of Science in Mathematics submitted in the School of Bachelor Science at K. R. Mangalam University, Gurugram, is an authentic record of my own work under the supervision of Dr. Yogendra Kumar Rajoria. The matter presented in this report has not been submitted by me (in any form) to any other University / Institute for the award of B. Sc. degree.

I hereby further declare that in case of any legal dispute in my B.Sc.(Hons) project report/dissertation, I will be solely responsible for the same.


  
Signature of the Student

Date: 28 July 2021


Name of the Student Dinesh Kumar

Roll No. 1803110002

This is to certify that the above statement made by the candidate is correct to the best of my/our knowledge.

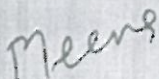
  
Signature of the Supervisor(s)

Name of the Supervisor DR. YOGENDRA KUMAR RAJORIA



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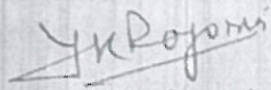
  
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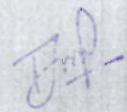
## CERTIFICATE

This is to certify that the project report entitled " Investigation Of Population Growth Problems By Using Laplace Transform Method" that is being submitted by Manish Kumar in partial fulfillment for the award of the degree of Bachelor of Science in Mathematics to K. R. Mangalam University, Gurugram, is a record of bonafide work carried out by him under my guidance and supervision. The results embodied in this project report/dissertation have not been submitted to any other university or institute of higher learning for the award of any degree.

  
Signature of the Supervisor(s)

Name of the Supervisor Dr. Yogendra Kumar Rajosi

Date 28/07/21

  
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Sohna Road, Gurugram, (Haryana)



**K.R. MANGALAM UNIVERSITY**  
THE COMPLETE WORLD OF EDUCATION

**Effect of covid-19 on Financial  
Management of OECD**

Submitted in the partial fulfillment of the requirement  
for the awarded of the degree of

**BACHELOR OF SCIENCE (HONOUR)**

In

**MATHEMATICS**

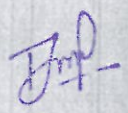
By

**Priya**

**1803110006**

**Under the supervision of**

**Dr.Pooj vats**

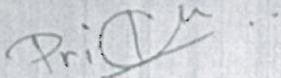
  
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## CANDIDATE'S DECLARATION

I hereby declare that the work which is being presented here entitled, "**effect of covid-19 on financial management of oecd**" by Priya in partial fulfillment of requirements for the award of the degree of Bachelor of Science in Mathematics submitted in the School of Basic and Applied Science at K.R. Mangalam University, Gurugram, is an authentic record of my own work under the supervision of Dr. Pooja vats . The matter presented in this report has not been submitted by me (in any form) to any other University / Institute for the award of B.Sc. degree.

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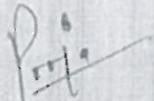
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Priya

Roll No. 1803110006

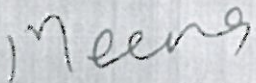
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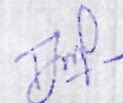
Signature of the Supervisor(s)

Dr. Pooja vats



Signature of Dean (SCHOOL)

Prof.(Dr.) MeenaBhandari



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Sohna Road, Gurugram, (Haryana)



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## CERTIFICATE

This is to certify that the project report entitled " effect of covid 19 on financial management of oecd "that is being submitted by Priya in partial fulfillment for the award of the degree of Bachelor of Science in Mathematics to K.R.Mangalam University, Gurugram, is a record of bonafide work carried out by him under my guidance and supervision. The results embodied in this project report/dissertation have not been submitted to any other university or institute of higher learning for the award of any degree.

Signature of the Supervisor(s)

Dr. Pooja vats

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## ACKNOWLEDGEMENT

A work is never successfully completed without the assistance and guidance from appropriate persons. I am glad to express my sincere gratitude towards all persons who have helped me to complete my work.

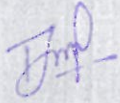
First and foremost, I would like to express my deep sense of gratitude and sincere thanks to my supervisor Dr. Pooja Vats for her guidance, endeavour throughout the course which helped me in timely completion of this work under whose guidance this task has become reality. I am extremely grateful to her for taking pains in checking my project and giving me valuable suggestion, help and encouragement, without her help it would have been indispensable to accomplish my work.

I am highly obliged to Prof. (Dr.) Meena Bhandari, Dean SBAS, for giving me this opportunity and the teaching and lab staff of the department for providing necessary facilities.

I am also highly grateful to all my friends for their help in completing my project in time.

Priy

1803110006

  
Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



# ICICI Bank Technical Analysis

submitted in the partial fulfilment of the requirements  
for the award of the degree of

## BACHELOR OF SCIENCE (HONOURS) IN MATHEMATICS

by

Shivani Raghav

Roll No. 1803110008


Under the supervision of

Mrs. Pooja Vats



Department of Mathematics  
School of Basic and Applied Science  
**K. R. MANGALAM UNIVERSITY**  
**GURGAON SOHNA ROAD**  
**GURGAON 122103**

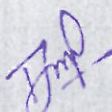
July, 2021

  
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Sohna Road, Gurugram, (Haryana)



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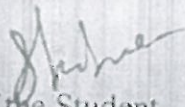
  
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## CANDIDATE'S DECLARATION

I hereby declare that the work which is being presented here entitled, "ICICI bank Technical Analysis by shivani in partial fulfillment of requirements for the award of the degree of Bachelor of Science in Mathematics submitted in the School of Bachelor Science at K. R. Mangalam University, Gurugram, is an authentic record of my own work under the supervision of Mrs pooja Vats . The matter presented in this report has not been submitted by me (in any form) to any other University / Institute for the award of B.Sc. degree.

I hereby further declare that in case of any legal dispute in my B.Sc.(Hons) project report/dissertation, I will be solely responsible for the same.



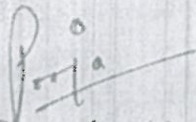
Signature of the Student

Name of the Student Shivani

Roll No. 1903110008

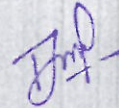
Date: 28 July 2021

This is to certify that the above statement made by the candidate is correct to the best of my/our knowledge.

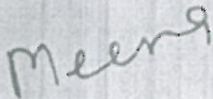


Signature of the Supervisor(s)

Name of the Supervisor



Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



Signature of Dean (SCHOOL)

Name of DEAN



## Acknowledgement

I would like to express my sincere gratitude to several individuals and organizations for supporting me throughout my Graduate study. First, I wish to express my sincere gratitude to my mentor, Mrs. Pooja Vats Mam, for his enthusiasm, patience, insightful comments, helpful information, practical advice and unceasing ideas that have helped me tremendously at all times in my research and writing of this project. His immense knowledge, experience and professional expertise has enabled me to complete this research successfully. Without his support and guidance, this project would not have been possible. I could not have imagined having a better mentor in my study.

I also thank all the faculty of Mathematics course who shared their knowledge in the classroom and followed my journey as a university student.

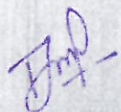
I also wish to express my sincere thanks to the KR Mangalam University for accepting me into the graduate program. Thank you for providing a healthy environment for all students, as well as encouraging creativity, interaction, and participation in academic activities.

A special thank of mine goes to my colleague who helped me out in completing the project, where they all exchanged their own interesting ideas, thoughts and made this possible to complete my project with all accurate information. I wish to thank my parents for their personal support or attention who inspired me to go my own way.

At last but not the least I want to thank my friends who treasured me for my hard work and encouraged me and finally to God who made all the things possible for me till the end."

Finally, last but by no means least; also to everyone in the university, it was great sharing premises with all of you during last three years.

Thanks for all your encouragement!

  
Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



# An Application of System of Linear Equation: Traffic Flow

submitted in the partial fulfillment of the requirements  
for the award of the degree of

BACHELOR OF SCIENCE (HONOURS)  
IN  
MATHEMATICS

by

ARUN KAUSHIK

Roll No. 1803110009

Under the supervision of  
Dr. RAHUL BOADH



Department of Mathematics  
School of Basic and Applied Science

K. R. MANGALAM UNIVERSITY  
GURGAON SOHNA ROAD  
GURGAON 122103

July 28, 2021



Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## DEDICATION

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This project is also especially dedicated to the teacher Dr. Rahul Bোধ who helped and guided me to successfully complete this project work. I want to say thank you sir for support, and I also dedicate my dissertation work to my parents and many friends. A special feeling of gratitude to my loving parents and my family who has never failed to give us financial support and moral support which encouraged to me and has been a wonderful supporter and also created an invisible homely and peaceful atmosphere to me until my research was completed. I also dedicate this dissertation to my many friends who have supported me throughout the process. I will always appreciate all they have done, especially Gaurav Singh for helping me by motivating. I dedicate this work and give special thanks to my teacher and friends for being there for me whenever I need help. Thanks to all of you.

Thanks.



Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## CANDIDATE'S DECLARATION

I hereby declare that the work which is being presented here entitled, "An Application of System Of Linear Equation: Traffic Flow" by Arun Kaushik partial fulfillment of requirements for the award of the degree of Bachelor of Science in Mathematics submitted in the School of Basic and Applied Science at K.R. Mangalam University, Gurugram, is an authentic record of my own work under the supervision of Dr. Rahul Boadh (Assistant Professor). The matter presented in this report has not been submitted by me (in any form) to any other University / Institute for the award of B.Sc. degree.

I hereby further declare that in case of any legal dispute in my B.Sc.(Hons) project report/dissertation, I will be solely responsible for the same.

Signature of the Student

*Arun Kaushik*

ARUN KAUSHIK

Roll No. 1803110009

Date-28 July 2021

This is to certify that the above statement made by the candidate is correct to the best of my/our knowledge.

*[Signature]*

Registrar

K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## CERTIFICATE

This is to certify that the project report entitled " An Application of System Of Linear Equation: Traffic Flow" that is being submitted by Arun Kaushik in partial fulfillment for the award of the degree of Bachelor of Science in Mathematics to K.R Mangalam University, Gurugram, is a record of work carried out by him under my guidance and supervision. The results embodied in this project report/dissertation have not been submitted to any other university or institute of higher learning for the award of any degree.

*Meena*

Counter Signed by-Supervisor **DEAN**  
Prof. (Dr) Meena Bhandari  
Dean, SBAS (School of Basic and Applied Science)  
K. R. Mangalam University  
Sohna road, Gurugram

*28/07/21*  
Dr. Rahul Bোধ  
(Assistant Professor), SBAS  
K.R Mangalam University

*J.P.*  
Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)





**K. R. MANGALAM UNIVERSITY**

THE COMPLETE WORLD OF EDUCATION

**Properties and Applications of  
Laplace Transform**

submitted in the partial fulfillment of the requirements

for the award of the degree of

**BACHELOR OF SCIENCE (HONOURS)**

IN

**MATHEMATICS**

*by*

**GOURAV KUMAR SINGH**

1803110003

Under the supervision of

**Dr. MINA YADAV**

Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)




# DEDICATION

---

I dedicate my dissertation work to my family and many friends. A special feeling of gratitude to my loving parents, and my sister whose words of encouragement and has been a wonderful supporter until my research was completed. I also dedicate this dissertation to my many friends who have supported me throughout the process. I will always appreciate all they have done, especially Pooja and Arun for helping me by motivating.

I dedicate this work and give special thanks to my best friend Sumit for being there for me whenever I need help.

This project is also especially dedicated to the teachers Dr. Ravendra Singh And Dr. Mina Yadav who helped and guided me to successfully complete this project work.

  
Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



# CANDIDATE'S DECLARATION

I hereby declare that the work which is being presented here entitled, "**Properties and Applications of Laplace Transform**" by Gourav Kumar Singh in partial fulfillment of requirements for the award of the degree of Bachelor of Science in Mathematics submitted in the School of Basic and Applied Science at K.R. Mangalam University, Gurugram, is an authentic record of my own work under the supervision of Dr. Mina Yadav. The matter presented in this report has not been submitted by me (in any form) to any other University / Institute for the award of B.Sc. degree.

I hereby further declare that in case of any legal dispute in my B.Sc.(Hons) project report/dissertation, I will be solely responsible for the same.

Gourav  
Signature of the Student  
Date: 28 July 2021  
Gourav Kumar Singh  
Roll No. 1803110003

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Mina  
28/7/21  
Signature of the Supervisor(s)  
Dr. Mina Yadav

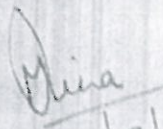
Meena  
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Prof.(Dr.) Meena Bhandari

JMD  
Registrar  
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Sohna Road, Gurugram, (Haryana)



# CERTIFICATE

This is to certify that the project report entitled "**Properties and Applications of Laplace Transform**" that is being submitted by Gourav Kumar Singh in partial fulfillment for the award of the degree of Bachelor of Science in Mathematics to K.R.Mangalam University, Gurugram, is a record of bonafide work carried out by him under my guidance and supervision. The results embodied in this project report/dissertation have not been submitted to any other university or institute of higher learning for the award of any degree.

  
28/7/21

Signature of the Supervisor(s)  
Dr. Mina Yadav

Date 28/7/21



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K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



# THE APPLICATION OF ODE TO FIND ORDER OF REACTION

submitted in the partial fulfillment of the requirements  
for the award of the degree of

## BACHELOR OF SCIENCE (HONOURS) IN MATHEMATICS

*by*

**Manish Kumar**  
Roll No. 1803110004

Under the supervision of

**Dr. Rahul Baudh**



Department of Mathematics  
School of Basic and Applied Science  
**K. R. MANGALAM UNIVERSITY**  
**GURGAON SOHNA ROAD**  
**GURGAON 122103**

Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



### CANDIDATE'S DECLARATION

I hereby declare that the work which is being presented here entitled, "THE APPLICATION OF ODE TO FIND ORDER OF REACTION" by Manish Kumar in partial fulfillment of requirements for the award of the degree of Bachelor of Science in Mathematics admitted in the School of Bachelor Science at K. R. Mangalam University, Gurugram, is an authentic result of my own work under the supervision of Dr. Rahul Boudh. The matter presented in this report has not been submitted by me (in any form) to any other University / Institute for the award of B.Sc. degree.

I hereby further declare that in case of any legal dispute in my B.Sc.(Hons) project report/dissertation, I will be solely responsible for the same.

मनीष कुमार

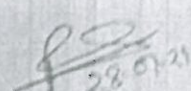
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Date: 28 July 2021

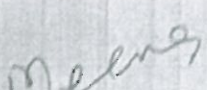
Name of the Student Manish Kumar

Roll No. 1803110004

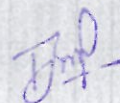
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 28.07.21  
Signature of the Supervisor(s)

Name of the Supervisor Dr. Rahul Boudh

  
Signature of Dean (SCHOOL)

Name of DEAN



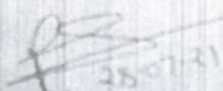
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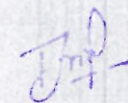
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This is to certify that the project report entitled "THE APPLICATION OF ODE TO FIND ORDER OF REACTION" that is being submitted by Manish Kumar in partial fulfillment for the award of the degree of Bachelor of Science in Mathematics to K. R. Mangalam University, Gurugram, is a record of bonafide work carried out by him under my guidance and supervision. The results embodied in this project report/dissertation have not been submitted to any other university or institute of higher learning for the award of any degree.

  
Signature of the Supervisor(s)

Name of the Supervisor *Dr. Rahul Bhandari*

Date *28/07/21*

  
Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## Acknowledgement

I would like to express my sincere gratitude to several individuals and organizations for supporting me throughout my Graduate study. First, I wish to express my sincere gratitude to my mentor, Dr. Rahul Baudh Sir, for his enthusiasm, patience, insightful comments, helpful information, practical advice and unceasing ideas that have helped me tremendously at all times in my research and writing of this project. His immense knowledge, experience and professional expertise has enabled me to complete this research successfully. Without his support and guidance, this project would not have been possible. I could not have imagined having a better mentor in my study.

I also thank all the faculty of Mathematics course who shared their knowledge in the classroom and followed my journey as a university student.

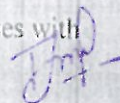
I also wish to express my sincere thanks to the KR Mangalam University for accepting me into the graduate program. Thank you for providing a healthy environment for all students, as well as encouraging creativity, interaction, and participation in academic activities.

A special thank of mine goes to my colleague who helped me out in completing the project, where they all exchanged their own interesting ideas, thoughts and made this possible to complete my project with all accurate information. I wish to thank my parents for their personal support or attention who inspired me to go my own way.

At last but not the least I want to thank my friends who treasured me for my hard work and encouraged me and finally to God who made all the things possible for me till the end."

Finally, last but by no means least; also to everyone in the university, it was great sharing premises with all of you during last three years.

Thanks for all your encouragement!



Registrar

K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



**Analysis and investigation of fuzzy expert system for  
predicting the child anaemia**

*Project Report submitted*

*In partial fulfilment of the requirement for the degree*

*of*

**Bachelor of Science in Mathematics (Honours)**

*By*

**Mr. Kabir Chaudhary**

**(Roll No.:1903110003)**

Under the guidance of

**Dr Rahul Boadh**



**School of Basic and Applied Sciences**

**K. R. MANGALAM UNIVERSITY**

**SOHNA ROAD, GURUGRAM**

**JUNE, 2022**

A handwritten signature in blue ink, appearing to be 'J.K.' followed by a flourish.

**Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)**



*This project is dedicated to my father Mr. Vipin Kumar who has always supported me not only like a father but also as a friend throughout my whole life. He always taught me to have faith in tough times because everything in life is achievable.*



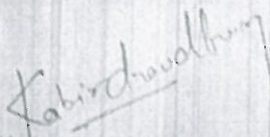
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K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## DECLARATION

I, Kabir Chaudhary, a bona-fide student of B.Sc. Mathematics of K. R. Mangalam University, Gurgaon would like to declare that the dissertation entitled "*Analysis and investigation of fuzzy expert system in predicting child anaemia*" submitted by me in partial fulfilment of the requirement for the award of the degree of Bachelors of Science in Mathematics is my original work.

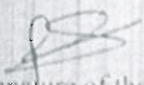
I hereby further declare that in case of any legal dispute in my B.Sc. (Hons) project report/dissertation, I will be solely responsible for the same.

  
Signature of the Student

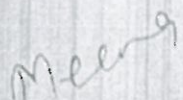
Date: 09-06-2022

Kabir Chaudhary  
190311003

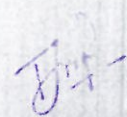
This is to certify that the above statement made by the candidate is correct to the best of my/our knowledge.

  
Signature of the Supervisor

Dr. Rahul Boudh

  
Signature of the Dean

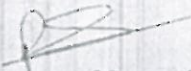
Dr. Meena Bhandari

  
Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## CERTIFICATE

This is to certify that the project report entitled "*Analysis and investigation of fuzzy expert system for predicting child anaemia*" that is being submitted by *Kabir Chaudhary* partial fulfilment for the award of the degree of Bachelor of Science in Mathematics to K.R. Mangalam University, Gurugram, is a record of bona-fide work carried out by him/her under my guidance and supervision. The results embodied in this project report/dissertation have not been submitted to any other university or institute of higher learning for the award of any degree.



Signature of Supervisor

Dr. Rahul Boodh

Date: 09-06-2022



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K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



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Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



**Investigation and Analysis of Linear Programming by various Methods**

*Project Report submitted*

*In partial fulfilment of the requirement for the degree*

*of*

**Bachelor of Science (Hons.) in Mathematics**

*By*

**Ms. Jeetika**

**(Roll No.:2003110001)**

Under the guidance of

**Dr.Yogendra Kumar Rajoria**




Department of Mathematics  
School of Basic and Applied Sciences

**K. R. MANGALAM UNIVERSITY**

**SOHNA ROAD, GURUGRAM**

**JULY, 2023**

  
Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## CONTENT:

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Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## DEDICATION

Every Challenging work needs self-effort as well as the guidance of elders, especially those who are very close to our hearts.

My work is dedicated to my parents, Mr. Sanjay Gulati and Mrs. Jyoti Gulati, my grandparents, Sh.Pritam Gulati, and my sister, Kanika Gulati, who encouraged and inspired me in every possible way. Words can hardly describe my thanks and appreciation for you. You have been my source of inspiration, support, and guidance.




Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)



## DECLARATION

I hereby declare that the work which is being presented here in the title "Investigation and Analysis of Linear Programming by Various Methods" in partial fulfilment of requirements for the award of the degree of B.Sc. (H) Mathematics submitted in the School of Basic and Applied Science at K. R. Mangalam University, Gurugram, is an authentic record of my own work carried out during a period from February 2023 to June 2023 under the supervision of Dr. Yogendra Kumar Rajoria. The matter presented in this report has not been submitted by me (in any form) to any other University or Institute

Place: Sohna



Ms Jeetika

Roll No. 2003110001

Bsc(H) Mathematics

Date: 12/07/2023



Registrar  
K.R. Mangalam University  
Sohna Road, Gurugram, (Haryana)