

Mathematics-I (Calculus and Linear Algebra) for Non Computer Science Engineering Branches

Author: Reena Garg

ISBN 13: 978-93-91505-19-6

ISBN 10: 93-91505-19-8

E-ISBN 13: 978-93-91505-19-6

Edition: 1

Pages: 688

Type of book : Paperback

Weight (g): 900.00

Year: 2025

Language: Telugu

Publisher: Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Telugu Books

Condition Type: New

Country Origin: India



Product Description

Calculus and Linear Algebra covers all the modules prescribed by AICTE model curriculum to all the 1st year CSE students studying in engineering institutions and universities of the country. It serves as both text book and /or useful reference work. It contains 5 units which include calculus, algebra and vector spaces along with their applications. This renowned and well respected title provides in one handy volume with the essential mathematical tools that helps in understanding the subject and problem solving techniques with many real life engineering applications. As per trademark of AICTE, this book is in student friendly style, author has endeavored enormous efforts in providing numerous solved examples and exercise under each topic to facilitate better understanding of the concepts to the students. Professional or those who are preparing for competitive examinations will also find this book very useful. This book will give the students a complete grasp of the mathematical skills that are needed by engineers all over the country. Some Salient Features of the Book: 1. In depth coverage of all related, essential and mentioned topics as per AICTE in simple presentation with clarity and accuracy. 2. Emphasis on the applications of concepts and theorems. 3. Core concepts are presented through a large number of solved graded model examples in an innovative and lucid manner. 4. A good number of relatively competitive problems are given at the end of each unit in the form of short questions, HOTS, assignments, MCQs and know more for student's practices purpose. Practical /Projects/ Activity also given in each unit for enhancing the student's capability, to increase the feeling of team work 5. To clarify the subject, the text has been supplemented through Notes, Observations and Remarks; an attempt has been made to explain the topic through maximum use of geometries wherever possible.6. Some standard problems with sufficient hints have been included in each exercise to gauge the student's visual understanding and for grasp the theory. 7. Video links, interesting facts, uses of ICT also included after each topic in every

Table of Contents

Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and

Symbols List of Figures Guidelines for Teachers Guidelines for Students

Chapter 1: Calculus-I.

Chapter 2: Calculus-II. Chapter 3: Matrices Chapter 4: Vector Spaces -I.

Chapter 5: Vector Spaces -

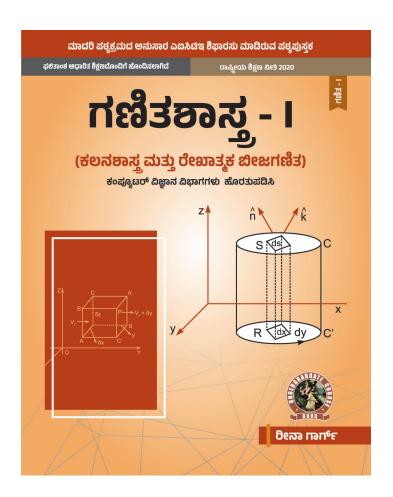
II. Index CO and Po Attainment Table.



About Author

Reena Garg Dr. Reena Garg, M.Sc. Mathematics (Gold Medalist), M.Phil, Ph.D is Assistant Professor (Mathematics) in YMCA University of Science & Technology, Faridabad (Haryana). She also taught in C.I.T.M. Faridabad (presently known as Manav Rachna International University, Faridabad). Her teaching experience of more than a decade has made this book more valuable for the knowledge seekers. She has published more than 10 research papers in various International Journals. She is a life-time member of Forum of Inter-disciplinary mathematics in India. She is a member of reviewer Board in IJRET, Bangalore.





Mathematics I Calculus and Linear Algebra [For Non Computer Science Engineering Branches]

Author: Reena Garg

ISBN 13: 978-93-91505-45-5

ISBN 10: 93-91505-45-7

E-ISBN 13: 978-93-91505-45-5

Edition: 1

Pages: 688

Type of book : Paperback

Weight (g): 900.00

Year: 2023

Language: Kannada

Publisher: Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Kannada Books

SKU: 1725656140

Condition Type: New

Country Origin: India



Product Description

Calculus, Multivariable Calculus and Linear Algebra covers all the Modules prescribed by AICTE. Model curriculum to all the 1st year students (except CSE) studying in engineering institutions and universities of the country. It serves as both text book and / or useful reference work. It contains 5 units which include calculus, matrices, sequences & series and multivariable calculus along with their applications. This renowned and well respected title provides in one handy volume with the essential mathematical tools that helps in understanding the subject and problem solving techniques with many real life engineering applications. As per trademark of AICTE, this book is in student friendly style, author has endeavored enormous efforts in providing numerous solved examples and exercise under each topic to facilitate better understanding of the concepts to the students. Majority of Questions in this book have been designed to success the reader understands of the subject. Professionals or those who are preparing for competitive examinations will also find this book very useful. This book will give the students a complete grasp of the mathematical skills that are needed by engineers all over the country. Some Salient Features of the Book: 1. In depth coverage of all related, essential and mentioned topics as per AICTE in simple presentation with clarity and accuracy. 2. Emphasis on the applications of concepts and theorems. 3. Core concepts are presented through a large number of solved graded model examples in an innovative and lucid manner. 4. A good number of relatively competitive problems are given at the end of each unit in the form of short questions, HOTS, assignments, MCQs and know more for student's practices purpose. Practical /Projects/ Activity also given in each unit for enhancing the student's capability, to increase the feeling of team work. 5. To clarify the subject, the text has been supplemented through Notes, Observations and Remarks; an attempt has been made to explain the topic through maximum use of geometries wherever possible. 6. Some standard problems with sufficient hints have been included in each exercise to gauge the



Table of Contents

Foreword

Acknowledgement

Preface

Outcome Based Education

Course Outcomes

Abbreviations and Symbols

List of Figures

Guidelines for Teachers

Guidelines for Students

Chapter 1: Calculus-I.

Chapter 2: Calculus-II.

Chapter 3: Sequences and Series.

Chapter 4: Multivariable Calculus -I.

Chapter 5: Matrices.

Index

CO and Po Attainment Table.

Author

Reena Garg

Dr. Reena Garg, M.Sc. Mathematics (Gold Medalist), M.Phil, Ph.D is Assistant Professor (Mathematics) in YMCA University of Science & Technology, Faridabad (Haryana). She also taught in C.I.T.M. Faridabad (presently known as Manav Rachna International University, Faridabad). Her teaching experience of more than a decade has made this book more valuable for the knowledge seekers. She has published more than 10 research papers in various International Journals. She is a life-time member of Forum of Inter-disciplinary mathematics in India. She is a member of reviewer Board in IJRET, Bangalore.

