



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

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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

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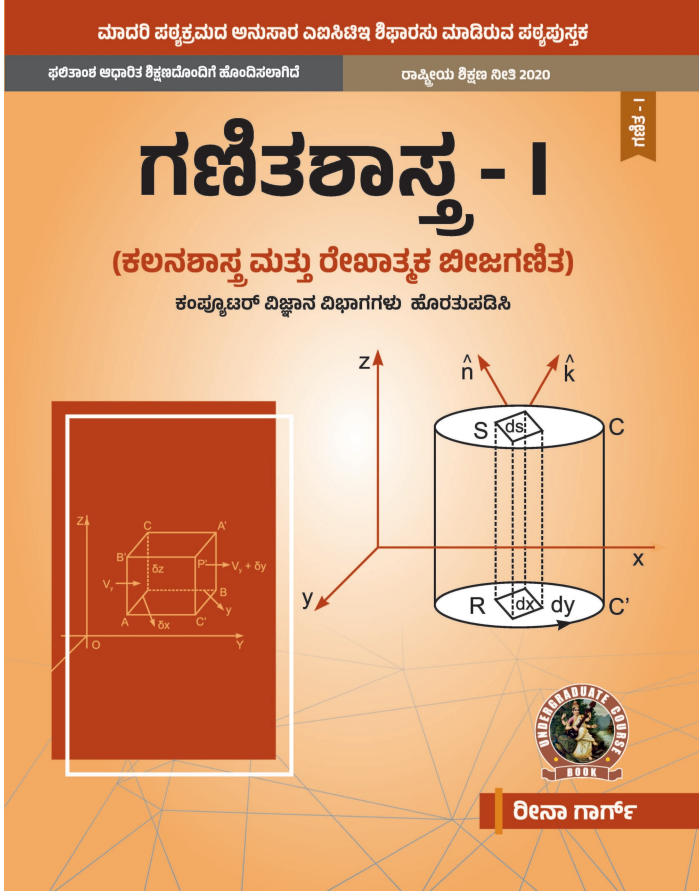
## About Author

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**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.

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

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## Author

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**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.

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