

Engineering Mathematics 1 Books Nirali Prakashan

Note: This is the 3rd edition. If you need the 2nd edition for a course you are taking, it can be found as a "other format" on amazon, or by searching its isbn: 1534970746 This gentle introduction to discrete mathematics is written for first and second year math majors, especially those who intend to teach. The text began as a set of lecture notes for the discrete mathematics course at the University of Northern Colorado. This course serves both as an introduction to topics in discrete math and as the "introduction to proof" course for math majors. The course is usually taught with a large amount of student inquiry, and this text is written to help facilitate this. Four main topics are covered: counting, sequences, logic, and graph theory. Along the way proofs are introduced, including proofs by contradiction, proofs by induction, and combinatorial proofs. The book contains over 470 exercises, including 275 with solutions and over 100 with hints. There are also Investigate! activities throughout the text to support active, inquiry based learning. While there are many fine discrete math textbooks available, this text has the following advantages: It is written to be used in an inquiry rich course. It is written to be used in a course for future math teachers. It is open source, with low cost print editions and free electronic editions. This third edition brings improved exposition, a new section on trees, and a bunch of new and improved exercises. For a complete list of changes, and to view the free electronic version of the text, visit the book's website at discrete.openmathbooks.org

The book in its present form is due to my interaction with the students for quite a long time. It had been my long-cherished desire to write a book covering most of the topics that form the syllabi of the Engineering and Science students at the degree level. Many students, although able to understand the various topics of the books, may not be able to put their knowledge to use. For this purpose a number of questions and problems are given at the end of each chapter.

Making use of digital technology for social care is a major responsibility of the computing domain. Social care services require attention for ease in social systems, e-farming, and automation, etc. Thus, the book focuses on suggesting software solutions for supporting social issues, such as health care, learning about and monitoring for disabilities, and providing technical solutions for better living. Technology is enabling people to have access to advances so that they can have better health. To undergo the digital transformation, the current processes need to be completely re-engineered to make use of technologies like the Internet of Things (IoT), big data analytics, artificial intelligence, and others. Furthermore, it is also important to consider digital initiatives in tandem with their cloud strategy instead of treating them in isolation. At present, the world is going through another, possibly even stronger revolution: the use of recent computing models to perform complex cognitive tasks to solve social problems in ways that were previously either highly complicated or extremely resource intensive. This book not only focuses the computing technologies, basic theories, challenges, and implementation but also covers case studies. It focuses on core theories, architectures, and technologies necessary to develop and understand the computing models and their applications. The book also has a high potential to be used as a recommended textbook for research scholars and post-graduate programs. The book deals with a problem-solving approach

using recent tools and technology for problems in health care, social care, etc. Interdisciplinary studies are emerging as both necessary and practical in universities. This book helps to improve computational thinking to "understand and change the world". It will be a link between computing and a variety of other fields. Case studies on social aspects of modern societies and smart cities add to the contents of the book to enhance book adoption potential. This book will be useful to undergraduates, postgraduates, researchers, and industry professionals. Every chapter covers one possible solution in detail, along with results.

Engineering Mathematics-I

Unit I - 1 linear Differential Equations With Constant Coefficients 2 Simultaneous Linear Differential Equations, Symmetric Simultaneous D.E. And Applications Unit II -3 Laplace And Fourier Transform 4 Inverse Laplace Transform Unit III - 5 Fourier transform 6 The Z Transform Unit IV- 7 Vector Algebra 8 Vector Differentiation Unit V - Vector Integration 10 Applications of vectors to Electromagnetic Fields Unit VI- 11 Complex Differentiation 12 Complex Integration And Conformal Mapping Model Question paper- Online Examination Model Question paper Theory Examination

About the Book: This book Engineering Mathematics-II is designed as a self-contained, comprehensive classroom text for the second semester B.E. Classes of Visveswaraiya Technological University as per the Revised new Syllabus. The topics included are Differential Calculus, Integral Calculus and Vector Integration, Differential Equations and Laplace Transforms. The book is written in a simple way and is accompanied with explanatory figures. All this make the students enjoy the subject while they learn. Inclusion of selected exercises and problems make the book educational in nature. It shou.

Designed for the core papers Engineering Mathematics II and III, which students take up across the second and third semesters, Engineering Mathematics Volume-II offers detailed theory with a wide variety of solved examples with reference to enginee

Class-tested and coherent, this textbook teaches classical and web information retrieval, including web search and the related areas of text classification and text clustering from basic concepts. It gives an up-to-date treatment of all aspects of the design and implementation of systems for gathering, indexing, and searching documents; methods for evaluating systems; and an introduction to the use of machine learning methods on text collections. All the important ideas are explained using examples and figures, making it perfect for introductory courses in information retrieval for advanced undergraduates and graduate students in computer science. Based on feedback from extensive classroom experience, the book has been carefully structured in order to make teaching more natural and effective. Slides and additional exercises (with solutions for lecturers) are also available through the book's supporting website to help course instructors prepare their lectures.

For Engineering students & also useful for competitive Examination.

Engineering Mathematics-iNirali PrakashanEngineering MathematicsTata McGraw-Hill EducationEngineering

Mathematics III Nirali Prakashan

This book aims at providing a complete coverage of the needs of First Year students as per S.B.T.E's. revised syllabus. The entire revised syllabus has been covered keeping in view the non-availability of the complete subject matter through a single source. The difficult articles have been explained in a simple language providing, wherever necessary, neat and well explained diagrams so that even an average student may be able to follow it independently. A sufficient number of solved examples and problems with answers and SBTE questions are given at the end of each topic. Formulae specifying symbol meaning are enlisted before solving the examples.

Because of its inherent simplicity, graph theory has a wide range of applications in engineering, and in physical sciences. It has of course uses in social sciences, in linguistics and in numerous other areas. In fact, a graph can be used to represent almost any physical situation involving discrete objects and the relationship among them. Now with the solutions to engineering and other problems becoming so complex leading to larger graphs, it is virtually difficult to analyze without the use of computers. This book is recommended in IIT Kharagpur, West Bengal for B.Tech Computer Science, NIT Arunachal Pradesh, NIT Nagaland, NIT Agartala, NIT Silchar, Gauhati University, Dibrugarh University, North Eastern Regional Institute of Management, Assam Engineering College, West Bengal University of Technology (WBUT) for B.Tech, M.Tech Computer Science, University of Burdwan, West Bengal for B.Tech. Computer Science, Jadavpur University, West Bengal for M.Sc. Computer Science, Kalyani College of Engineering, West Bengal for B.Tech. Computer Science. Key Features: This book provides a rigorous yet informal treatment of graph theory with an emphasis on computational aspects of graph theory and graph-theoretic algorithms. Numerous applications to actual engineering problems are incorporated with software design and optimization topics.

This book is written strictly according to the new revised syllabus of Savitribai Phule Pune University to be implemented from June 2019. We have taken utmost care to present the matter systematically and with proper flow of mathematical concepts. We begin the Chapter by Introduction and at the end the Summary of the Chapter is provided. We have added one significant feature: "Think Over It" in this new edition.

Introduction - Conduction - Convection - Radiation - Heat Exchange Equipments - Evaporation - Diffusion - Distillation - Gas Absorption - Liquid Liquid Extraction - Crystallisation - Drying - Appendix I Try yourself - Appendix II Thermal conductivity data - Appendix III Steam tables

"The subject matter of the book has been organized in two parts covering the syllabi of both first and second semester."--Pref.

Some chapters in the book deal with the basic principles of chemistry while others are focused on its applied aspects,

providing the correct interphase between the principles of chemistry and engineering. KEY FEATURES * Chapters cover both basic principles of chemistry as also its applied aspects. * Written in easy self-explanatory language and in depth at the same time. * Review questions provided at the end of each chapter. * A separate section 'Laboratory Manual' in Engineering Chemistry comprising 12 experiments is appended at the end of the book.

Engineering Mathematics – 1 is designed as per the latest MAKAUT syllabus for first year engineering students. This book seeks to build fundamental concepts as well as help students in their semester examination. Each topic of the book is lucidly explained and illustrated with wide variety of examples. It provides crisp but complete coverage of topics which will help students in their higher semester examinations. Salient Features: - Complete coverage of the new MAKAUT 2018 syllabus for all streams of engineering - Deep coverage of topics such as Calculus, Fourier Series, Matrix Theory and Vector Spcaes - Step-wise explanation of different methods of solving problems

Now in its seventh edition, Basic Engineering Mathematics is an established textbook that has helped thousands of students to succeed in their exams. Mathematical theories are explained in a straightforward manner, being supported by practical engineering examples and applications in order to ensure that readers can relate theory to practice. The extensive and thorough topic coverage makes this an ideal text for introductory level engineering courses. This title is supported by a companion website with resources for both students and lecturers, including lists of essential formulae, multiple choice tests, and full solutions for all 1,600 further questions.

This book details decision analysis techniques with applications in engineering design and management and also analyzes decision making and risk management processes to better understand and improve decision making systems. Most books on decision analysis fall into two categories: those that are straightforward management decision making texts that do not delve into more sophisticated techniques and concepts and those that emphasize the theoretical and analytical aspects, but do not discuss other perspectives on decision making. As such, this is the first book to present multiple perspectives on decision making without being too theoretical, all in effort to be useful to current and future engineers. The book presents three varied perspectives on decision making: problem-solving; the decision making process; and decision making systems. Practical examples and applications are plentiful and illustrate how to model and improve decision making systems. The mathematical rigor is kept to a minimum and is only used when comparing and contrasting different techniques. Extensive instructor resources are available, including worked solutions to all exercises, daily lesson plans for lectures, in-class activities, and sample assignments and exams. Topical coverage includes: an introduction to engineering decision making; decision making fundamentals; multi-criteria decision making; group decision making; decision making under uncertainty; game theory; decision making processes; the value of information; risk management; decision making systems; and modeling and improving decision making systems.

Dimensionless quantities, such as π , e , and ϕ are used in mathematics, engineering, physics, and chemistry. In recent years the

dimensionless groups, as demonstrated in detail here, have grown in significance and importance in contemporary mathematical and computer modeling as well as the traditional fields of physical modeling. This book offers the most comprehensive and up to date resource for dimensionless quantities, providing not only a summary of the quantities, but also a clarification of their physical principles, areas of use, and other specific properties across multiple relevant fields. Presenting the most complete and clearly explained single resource for dimensionless groups, this book will be essential for students and researchers working across the sciences. Includes approximately 1,200 dimensionless quantities Features both classic and newly developing fields Easy to use with clear organization and citations to relevant works

1. This book deals with CBSE New Pattern Physics for Class 11 2. It is divided into 8 chapters as per Term 1 Syllabus 3. Quick Revision Notes covering all the Topics of the chapter 4. Carries all types of Multiple Choice Questions (MCQs) 5. Detailed Explanation for all types of questions 6. 3 practice papers based on entire Term 1 Syllabus with OMR Sheet With the introduction of new exam pattern, CBSE has introduced 2 Term Examination Policy, where; Term 1 deals with MCQ based questions, while Term 2 Consists of Subjective Questions. Introducing, Arihant's "CBSE New Pattern Series", the first of its kind providing the complete emphasize on Multiple Choice Questions which are designated in TERM 1 of each subject from Class 9th to 12th. Serving as a new preparatory guide, here's presenting the all new edition of "CBSE New Pattern Physics for Class 11 Term 1" that is designed to cover all the Term I chapters as per rationalized syllabus in a Complete & Comprehensive form. Focusing on the MCQs, this book divided the first have syllabus of Physics into 8 chapters giving the complete coverage. Quick Revision Notes are covering all the Topics of the chapter. As per the prescribed pattern by the board, this book carries all types of Multiple Choice Questions (MCQs) including; Assertion – Reasoning Based MCQs and Cased MCQs for the overall preparation. Detailed Explanations of the selected questions help students to get the pattern and questions as well. Lastly, 3 Practice Questions are provided for the revision of the concepts. TOC Physical World, Units and Measurement, Motion in a Straight, Motion in a Plane, Laws of Motion, Work, Energy and Power, System of Particles and Rotational Motion, Gravitation, Practice Papers (1-3). Now in its eighth edition, Higher Engineering Mathematics has helped thousands of students succeed in their exams. Theory is kept to a minimum, with the emphasis firmly placed on problem-solving skills, making this a thoroughly practical introduction to the advanced engineering mathematics that students need to master. The extensive and thorough topic coverage makes this an ideal text for upper-level vocational courses and for undergraduate degree courses. It is also supported by a fully updated companion website with resources for both students and lecturers. It has full solutions to all 2,000 further questions contained in the 277 practice exercises.

1 Linear Differential Equations With Constant Coefficients 2 Simultaneous linear Differential Equations, Symmetrical Simultaneous D.E. and Applications of Differential Equations 3 Fourier transform 4 The z Transform 5 Statistics, Correlation And Regression 6 Probability And Probability Distributions 7 Vector Algebra 8 Vector Diffrentiation 9 Vector Integration 10 Applications of vectors to Electromagnetic Fields 11 Complex Differentiation 12 Complex Integration And Conformal Mapping Model Question Paper: Online

Examination Theory Examination

Communication skills are therefore essential for the successful future career of a student. In today's competitive world, communication skills in business are the most sought after quality of an educated person. Reading, writing and listening carefully are the three most important communication skills for students. It thus gives me immense pleasure in bringing out the first edition of this book as per the new syllabus effective from June 2017. Great care has been taken to cover the whole syllabus concerning different aspects of Communication Skills - II as prescribed in the new curricular syllabus for Jharkhand.

1 Elementary Concepts 2 Magnetic Circuits 3 Electromagnetic Induction 4 Single Phase Transformers 5 Electrostatics 6 A C fundamentals 7 Single Phase A C circuits 8 Three Phase A C Circuits 9 D C Circuits Appendix

1 Linear Differential Equation 2 Simultaneous Linear Differential Equations, Symmetrical Simultaneous D e and Applications of Differential Equations 3 Fourier Transform 4 The Z Transform 5 Interpolation, numerical Diffrentiation and iontegration 6 Numerical Solution of ordinary Differential Equations 7 vector Algebra 8 Vector Differentiation 9 Vector Integration 10 Applications of vectors to Electromagnetic Fields 11 Complex Differentiation 12 Complex Integration and Conformal Mapping Model Question Paper: online Examination (Phase I & II) Model Question Paper: Theory Examination

Engineering Mathematics with Examples and Applications provides a compact and concise primer in the field, starting with the foundations, and then gradually developing to the advanced level of mathematics that is necessary for all engineering disciplines. Therefore, this book's aim is to help undergraduates rapidly develop the fundamental knowledge of engineering mathematics. The book can also be used by graduates to review and refresh their mathematical skills. Step-by-step worked examples will help the students gain more insights and build sufficient confidence in engineering mathematics and problem-solving. The main approach and style of this book is informal, theorem-free, and practical. By using an informal and theorem-free approach, all fundamental mathematics topics required for engineering are covered, and readers can gain such basic knowledge of all important topics without worrying about rigorous (often boring) proofs. Certain rigorous proof and derivatives are presented in an informal way by direct, straightforward mathematical operations and calculations, giving students the same level of fundamental knowledge without any tedious steps. In addition, this practical approach provides over 100 worked examples so that students can see how each step of mathematical problems can be derived without any gap or jump in steps. Thus, readers can build their understanding and mathematical confidence gradually and in a step-by-step manner. Covers fundamental engineering topics that are presented at the right level, without worry of rigorous proofs Includes step-by-step worked examples (of which 100+ feature in the work) Provides an emphasis on numerical methods, such as root-finding algorithms, numerical integration, and numerical methods of differential equations Balances theory and practice to aid in practical problem-solving in various contexts and applications

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