Das Pal Engineering Mathematics Ebook

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.

Praise for the First Edition ". . . outstandingly appealing with regard to its style, contents, considerations of requirements of practice, choice of examples, and exercises." —Zentrablatt Math ". . . carefully structured with many detailed worked examples . . ." —The Mathematical Gazette ". . . an up-to-date and user-friendly account . . ." —Mathematika An Introduction to Numerical Methods and Analysis addresses the mathematics underlying approximation and scientific computing and successfully explains where approximation methods come from, why they sometimes work (or don't work), and when to use one of the many techniques that are available. Written in a style that emphasizes readability and usefulness for the numerical methods novice, the book begins with basic, elementary material and gradually builds up to more advanced topics. A selection of concepts required for the study of computational mathematics is introduced, and simple approximations using Taylor's Theorem are also treated in some depth. The text includes exercises that run the gamut from simple hand computations, to challenging derivations and minor proofs, to programming exercises. A greater emphasis on applied exercises as well as the cause and effect associated with numerical mathematics is featured throughout the book. An Introduction to Numerical Methods and Analysis is the ideal text for students in advanced undergraduate mathematics and engineering courses who are interested in gaining an understanding of numerical methods and numerical analysis.

An award-winning scientist offers his unorthodox approach to childrearing: "Parentology is brilliant, jaw-droppingly funny, and full of wisdom…bound to change your thinking about parenting and its conventions" (Amy Chua, author of Battle Hymn of the Tiger Mother). If you're like many parents, you might ask family and friends for advice when faced with important choices about how to raise your kids. You might turn to parenting books or simply rely on timeworn religious or cultural traditions. But when Dalton Conley, a dual-doctorate scientist and full-blown nerd, needed childrearing advice, he turned to scientific research to make the big decisions. In Parentology, Conley hilariously reports the results of those experiments, from bribing his kids to do math (since studies show conditional cash transfers improved educational and health outcomes for kids) to teaching them impulse control by giving them weird names (because evidence shows kids with unique names learn not to react when their peers tease them) to getting a vasectomy (because fewer kids in a family mean smarter kids). Conley encourages parents to draw on the latest data to rear children, if only because that level of engagement with kids will produce solid and happy ones. Ultimately these experiments are very loving, and the outcomes are redemptive—even when Conley's sassy kids show him the limits of his profession. Parentology teaches you everything you need to know about the latest literature on parenting—with lessons that go down easy. You'll be laughing and learning at the same time.

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 Univerity 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 incorpo-rated with software design and optimization topics.

Discrete Mathematics
Engineering Mathematics - Ii
Everything You Wanted to Know about the Science of Raising Children but Were Too Exhausted to Ask
Security, Privacy, and Applied Cryptography Engineering
Solution Manual to Engineering Mathematics
S Chand Higher Engineering Mathematics

This book constitutes the refereed proceedings of the 9th International Conference on Security, Privacy, and Applied Cryptography Engineering, SPACE 2019, held in Gandhinagar, India, in December 2019. The 12 full papers presented were carefully reviewed and selected from 24 submissions. This annual event is devoted to various aspects of security, privacy, applie very challenging field, requiring the expertise from diverse domains, ranging from mathematics to solid-state circuit design.

Introduces machine learning and its algorithmic paradigms, explaining the principles behind automated learning approaches and the considerations underlying their usage.

This book brings together the latest findings on efficient solutions of multi/many-objective optimization problems from the leading researchers in the field. The focus is on solving real-world optimization problems using strategies ranging from evolutionary to hybrid frameworks, and involving various computation platforms. The topics covered include solution framewo areas like Analytics, Cancer Research, Traffic Management, Networks and Communications, E-Governance, Quantum Technology, Image Processing, etc. As such, the book offers a valuable resource for all postgraduate students and researchers interested in exploring solution frameworks for multi/many-objective optimization problems.

Introduction to Engineering Mathematics Volume-II has been thoroughly revised according to the New Syllabi (2018 onwards) of Dr. A.P.J. Abdul Kalam Technical University (AKTU, Lucknow). The book contains 15 chapters divided among five modules - Ordinary Differential Equations of Higher Order, Multivariable Calculus-II, Sequence and Series, Complex Variable Differe It contains numerous solved examples from question papers of examinations recently held by different universities and engineering colleges so that the students may not find any difficulty while answering these problems in their final examination.

Proceedings of Seventh International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2012)
Engineering Mathematics II
Shallow Foundations

An Introduction to Numerical Methods and Analysis
Proceedings of International Conference on Innovations in Software Architecture and Computational Systems

A groundbreaking and comprehensive reference that's been a bestseller since 1970, this new edition provides a broad mathematical survey and covers a full range of topics from the very basic to the advanced. For the first time, a personal tutor CD-ROM is included.

Engineering Mathematics - IiNew Age International

This 2002 book examines the interaction between ocean waves and oscillating systems. With a focus on linear analysis of low-amplitude waves, the text is designed to convey a thorough understanding of wave interactions. Topics covered include the background mathematics of oscillations, gravity waves on water, the dynamics of wave-body interactions, and the absorption of wave energy by oscillating bodies. Linear algebra, complex numbers, differential equations, and Fourier transformation are utilized as bases for the analysis, and each chapter ends with problems. While the book's focus is on linear theory, the practical application of energy storage and transport is interwoven throughout. This book will be appropriate for those with backgrounds in elementary fluid dynamics or hydrodynamics and mathematical analysis. Graduate students and researchers will find it an excellent source of wave energy theory and application.

This book highlights the latest advances in engineering mathematics with a main focus on the mathematical models, structures, concepts, problems and computational methods and algorithms most relevant for applications in modern technologies and engineering. It addresses mathematical methods of algebra, applied matrix analysis, operator analysis, probability theory and stochastic processes, geometry and computational methods in network analysis, data classification, ranking and optimisation. The individual chapters cover both theory and applications, and include a wealth of figures, schemes, algorithms, tables and results of data analysis and simulation. Presenting new methods and results, reviews of cutting-edge research, and open problems for future research, they equip readers to develop new mathematical methods and concepts of their own, and to further compare and analyse the methods and results discussed. The book consists of contributed chapters covering research developed as a result of a focused international seminar series on mathematics and applied mathematics and a series of three focused international research workshops on engineering mathematics organised by the Research Environment in Mathematics and Applied Mathematics at Mälardalen University from autumn 2014 to autumn 2015: the International Workshop on Engineering Mathematics for Electromagnetics and Health Technology; the International Workshop on Engineering Mathematics, Algebra, Analysis and Electromagnetics; and the 1st Swedish-Estonian International Workshop on Engineering Mathematics, Algebra, Analysis and Applications. It serves as a source of inspiration for a broad spectrum of researchers and research students in applied mathematics, as well as in the areas of applications of mathematics considered in the book.

Fundamentals of Mathematical Statistics
Basic Engineering Mathematics
SocProS 2017, Volume 2
Mathematical Methods for Physics and Engineering
Evolutionary to Hybrid Framework
Engineering Mathematics Volume Ii

For B.E./B.Tech. / B.Arch. Students for First Semester of all Engineering Colleges of Maha Maya Technical University, Noida and Gautam Buddha Technical University, Lucknow

Engineering Mathematics (Conventional and Objective Type) completely covers the subject of Engineering Mathematics for engineering students (as per AICTE) as well as engineering entrance exams such as GATE, IES, IAS and Engineering Services Exams. Though a first edition, the book is enriched by 50 years of Academics and professional experience of the Author(s) and the experience of more than 85 published books.

In the last 60 years, the use of the notion of category has led to a remarkable unification and simplification of mathematics. Conceptual Mathematics introduces this tool for the learning, development, and use of mathematics, to beginning students and also to practising mathematical scientists. This book provides a skeleton key that makes explicit some concepts and procedures that are common to all branches of pure and applied mathematics. The treatment does not presuppose knowledge of specific fields, but rather develops, from basic definitions, such elementary categories as discrete dynamical systems and directed graphs; the fundamental ideas are then illuminated by examples in these categories. This second edition provides links with more advanced topics of possible study. In the new appendices and annotated bibliography the reader will find concise introductions to adjoint functors and geometrical structures, as well as sketches of relevant historical developments.

Following the popularity of the previous edition, Shallow Foundations: Bearing Capacity and Settlement, Third Edition, covers all the latest developments and approaches to shallow foundation engineering. In response to the high demand, it provides updated data and revised theories on the ultimate and allowable bearing capacities of shallow foundations. Additionally, it features the most recent developments regarding eccentric and inclined loading, the use of stone columns, settlement computations, and more. Example cases have been provided throughout each chapter to illustrate the theories presented.

A Text Book of Engineering Mathematics
Graph Theory with Applications to Engineering and Computer Science
Parentology
Introduction to Engineering Mathematics Vol-III (GBTU)
A Comprehensive Guide
7th International Conference, PReMI 2017, Kolkata, India, December 5-8, 2017, Proceedings

This book is primarily written according to the latest syllabus (July 2013) of Mahamaya Technical University, Noida for the third semester students of B.E./B.Tech/B.Arch. The textbook is for the Group B [ME, AE, MT, TT, TE, TC, FT, CE, CH, etc. Branches] of B.Tech III Semester. The Solved Question Paper of Dec. 2012 is included in the body of the text.

The third edition of this highly acclaimed undergraduate textbook is suitable for teaching all the mathematics for an undergraduate course in any of the physical sciences. As well as lucid descriptions of all the topics and many worked examples, it contains over 800 exercises. New stand-alone chapters give a systematic account of the 'special functions' of physical science, cover an extended range of practical applications of complex variables, and give an introduction to quantum operators. Further tabulations, of relevance in statistics and numerical integration, have been added. In this edition, half of the exercises are provided with hints and answers and, in a separate manual available to both students and their teachers, complete worked solutions. The remaining exercises have no hints, answers or worked solutions and can be used for unaided homework; full solutions are available to instructors on a password-protected web site, www.cambridge.org/9780521679718.

Engineering Mathematics
Engineering Mathematics-III has been mapped to the syllabus of the third-semester mathematics paper taught to the students of electrical engineering, electrical and electronics engineering and electronics and communication engineering in Rajasthan Technical University, Kota. The book, a balanced mix of theory and solved problems, focuses on problem-solving techniques and engineering applications to ensure that students learn the mathematical skills needed for engineers. The last three years' solved question papers have been included for the benefit of the students.

Engineering Mathematics Vol. One 4Th Ed.
Problems and Solutions in Higher Engg. Math Vol-III
Introduction to Engineering.Mathematics Vol-1(GBTU)
Engineering Mathematics, Volume-1 (For VTU, Karnataka, As Per CBCS)
Introduction to Engineering Mathematics - Volume IV [APJAKTU]
9th International Conference, SPACE 2019, Gandhinagar, India, December 3-7, 2019, Proceedings

For Engineering students & also useful for competitive Examination.

Introduction to Engineering Mathematics - Volume IV has been thoroughly revised according to the New Syllabi (2018 onwards) of Dr. A.P.J. Abdul Kalam Technical University (AKTU, Lucknow). The book contains 13 chapters divided among five modules - Partial Differential Equations, Applications of Partial Differential Equations, Statistical Techniques - I, Statistical Techniques - II and Statistical Techniques - III.

Embedded systems are today, widely deployed in just about every piece of machinery from toasters to spacecraft. Embedded system designers face many challenges. They are asked to produce increasingly complex systems using the latest technologies, but these technologies are changing faster than ever. They are asked to produce better quality designs with a shorter time-to-market. They are asked to implement increasingly complex functionality but more importantly to satisfy numerous other constraints. To achieve the current goals of design, the designer must be aware with such design constraints and more importantly, the factors that have a direct effect on them. One of the challenges facing embedded system designers is the selection of the optimum processor for the application in hand; single-purpose, general-purpose or application specific. Microcontrollers are one member of the family of the application specific processors. The book concentrates on the use of microcontroller as the embedded system's processor, and how to use it in many embedded system applications. The book covers both the hardware and software aspects needed to design using microcontroller. The book is ideal for undergraduate students and also the engineers that are working in the field of digital system design.

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.

Soft Computing for Problem Solving
Introduction to Engineering Mathematics - Volume II [APJAKTU Lucknow]
Conceptual Mathematics
Engineering Mathematics: Volume II
Understanding Machine Learning
Linear Interactions Including Wave-Energy Extraction

Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Some prominent additions are given below: 1. Variance of Degenerate Random Variable 2. Approximate Expression for Expectation and Variance 3. Lyapounov's Inequality 4. Holder's Inequality 5. Minkowski's Inequality 6. Double Expectation Rule or Double-E Rule and many others

This two-volume book presents outcomes of the 7th International Conference on Soft Computing for Problem Solving, SocProS 2017. This conference is a joint technical collaboration between the Soft Computing Research Society, Liverpool Hope University (UK), the Indian Institute of Technology Roorkee, the South Asian University New Delhi and the National Institute of Technology Silchar, and brings together researchers, engineers and practitioners to discuss thought-provoking developments and challenges in order to select potential future directions The book presents the latest advances and innovations in the interdisciplinary areas of soft computing, including original research papers in the areas including, but not limited to, algorithms (artificial immune systems, artificial neural networks, genetic algorithms, genetic programming, and particle swarm optimization) and applications (control systems, data mining and clustering, finance, weather forecasting, game theory, business and forecasting applications). It is a valuable resource for both young and experienced researchers dealing with complex and intricate real-world problems for which finding a solution by traditional methods is a difficult task.

This volume links the concept of granular computing using deep learning and the Internet of Things to object tracking for video analysis. It describes how uncertainties, involved in the task of video processing, could be handled in rough set theoretic granular computing frameworks. Issues such as object tracking from videos in constrained situations, occlusion/overlapping handling, measuring of the reliability of tracking methods, object recognition and linguistic interpretation in video scenes, and event prediction from videos, are the addressed in this volume. The book also looks at ways to reduce data dependency in the context of unsupervised (without manual interaction/ labeled data/ prior information) training.This book may be used both as a textbook and reference book for graduate students and researchers in computer science, electrical engineering, system science, data science, and information technology, and is recommended for both students and practitioners working in computer vision, machine learning, video analytics, image analytics, artificial intelligence, system design, rough set theory, granular computing, and soft computing.

The book is a collection of high quality peer reviewed research papers presented in Seventh International Conference on Bio-Inspired Computing (BIC-TA 2012) held at ABV-IIITM Gwalior, India. These research papers provide the latest developments in the broad area of "Computational Intelligence". The book discusses wide variety of industrial, engineering and scientific applications of nature/bio-inspired computing and presents invited papers from the inventors/originators of novel computational techniques.

Multi-Objective Optimization
Algebraic, Stochastic and Analysis Structures for Networks, Data Classification and Optimization
Volume 1
Pattern Recognition and Machine Intelligence
Engineering Mathematics - III:
Digital System Design - Use of Microcontroller

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

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 Visveswaraiah 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.

This book constitutes the proceedings of the 7th International Conference on Pattern Recognition and Machine Intelligence, PReMI 2017,held in Kolkata, India, in December 2017. The total of 86 full papers presented in this volume were carefully reviewed and selected from 293 submissions. They were organized in topical sections named: pattern recognition and machine learning; signal and image processing; computer vision and video processing; soft and natural computing; speech and natural language processing; bioinformatics and computational biology; data mining and big data analytics; deep learning; spatial data science and engineering; and applications of pattern recognition and machine intelligence.

An Open Introduction
From Theory to Algorithms
Bearing Capacity and Settlement, Third Edition
Higher Engineering Mathematics
A First Introduction to Categories
SocProS 2017, Volume 1