

Engineering Book Of Atul Prakashan

During the 19th century, the engineering of ports and harbours became a large and specialised branch of the profession. This development began in ports in physically difficult locations and may be particularly identified with the growth of the Port of Liverpool. Stimulated by the arrival of ever-larger steamships and the heavy investment in port facilities that they demanded, it spread around much of the world. The opening papers give examples of what could be achieved in antiquity; the following ones set out the advances in design and technology from 1700 to the start of this century - and note some of the failures and recurrent problems. They also illustrate the critical importance of political and economic factors in determining what the engineers achieved.

A rigorous and thorough analysis of the production of air pollutants and their control, this text is geared toward chemical and environmental engineering students. Topics include combustion, principles of aerosol behavior, theories of the removal of particulate and gaseous pollutants from effluent streams, and air pollution control strategies. 1988 edition. Reprint of the Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1988 edition.

Updated Edition Includes a New Chapter and Enhanced Study Material The second edition of Environmental Microbiology for Engineers explores the role that microorganisms play in the engineered protection and enhancement of an environment. Offering a perfect balance of microbiological knowledge and environmental biotechnology principles, it provides a practical understanding of microorganisms and their functions in the environment and in the environmental engineering systems. The book also presents a quantitative description of applied microbiological processes and their engineering design. This updated edition adds a new chapter on construction biotechnology, and offers new end-of-chapter exam questions with solutions to aid readers with performing the design calculations needed and to enhance understanding of the material. The book covers essential topics that include: Diversity and functions of microorganisms in environmental engineering systems Environmental bioengineering processes Applied microbial genetics and molecular biology Microbiology of water and wastewater treatment Biotreatment of solid waste and soil bioremediation Microbial monitoring of environmental engineering systems Biocorrosion and biodeterioration of materials Biocementation and bioclogging of soil Biopollution of indoor environment Biofouling of facilities, and more Environmental Microbiology for Engineers provides a practical understanding of microorganisms in the civil engineering process and their functions in the environmental engineering systems, and is designed for practicing environmental engineers working in the areas of wastewater, solid waste treatment, soil remediation and ground improvement.

This comprehensive book is specially developed for the candidates of National Means Cum Merit Scholarship Exam (For Class VIII). This book includes Study Material & Previous Papers for the purpose of practice of questions based on the latest pattern of the examination. Detailed Explanatory Answers have also been provided for the selected questions for Better Understanding of the Candidates

This book covers a wide range of topics that address the main areas of interest to scientists, engineers, and students concerned with the synthesis, characterization and applications of nanomaterials. Development techniques, properties, and examples of industrial applications are all widely represented as they apply to various nanostructured materials including nanocomposites and multilayered nanometric coatings. It is recommended to anyone working in the field of nanomaterials, especially in connection with the functionalization and engineering of surfaces.

The Assistant Mechanical Engineer Passbook(R) prepares you for your test by allowing you to take practice exams in the subjects you need to study.

Tool Engineering Jigs and Fixtures Port and Harbour Engineering Routledge

This book focuses on Process Engineering and Design of Chemical Plant and Equipment. It delves into the evaluation of options for design including innovation, cost-effectiveness, safety etc. as important evaluation criteria.

This alphabetical installment of the Baby University series is the perfect introduction for even the youngest physicists! A is for Atom B is for Black Hole C is for Charge From atom to zero-point energy, The ABCs of Physics is a colorfully simple introduction for babies—and grownups—to a new physics concept for every letter of the alphabet. Written by an expert, each page in this physics primer features multiple levels of text so the book grows along with your little scientist. Also in the Baby University Series: ABCs of Science ABCs of Mathematics Rocket Science for Babies Baby University: It only takes a small spark to ignite a child's mind.

Fans of Chris Ferrie's ABCs of Biology, ABCs of Space, and ABCs of Physics will love this introduction to engineering for babies and toddlers! This alphabetical installment of the Baby University baby board book series is the perfect introduction to science for infants and toddlers. It makes a wonderful science baby gift for even the youngest engineer. Give the gift of learning to your little one at birthdays, baby showers, holidays, and beyond! A is for Amplifier B is for Battery C is for Carnot Engine From amplifier to zoning, the ABCs of Engineering is a colorfully simple introduction to STEM for babies and toddlers to a new engineering concept for every letter of the alphabet. Written by two experts, each page in this engineering primer features multiple levels of text so the book grows along with your little engineer. If you're looking for the perfect STEAM book for teachers, science toys for babies, or engineer toys for kids, look no further! ABCs of Engineering offers fun early learning for your little scientist!

Until the late 1980s, information processing was associated with large mainframe computers and huge tape drives. During the 1990s, this trend shifted toward information processing with personal computers, or PCs. The trend toward miniaturization continues and in the future the majority of information processing systems will be small mobile computers, many of which will be embedded into larger products and interfaced to the physical environment. Hence, these kinds of systems are called embedded systems. Embedded systems together with their physical environment are called cyber-physical systems. Examples include systems such as transportation and fabrication equipment. It is expected that the total market volume of embedded systems will be significantly larger than that of traditional information processing systems such as PCs and mainframes. Embedded systems share a number of common characteristics. For example, they must be dependable, efficient, meet real-time constraints and require customized user interfaces (instead of generic keyboard and mouse interfaces). Therefore, it makes sense to consider common principles of embedded system design. Embedded System Design starts with an introduction into the area and a survey of specification models and languages for embedded and cyber-physical systems. It provides a brief overview of hardware devices used for such systems and presents the essentials of system software for embedded systems, like real-time operating systems. The book also discusses evaluation and validation techniques for embedded systems. Furthermore, the book presents an overview of techniques for mapping applications to execution platforms. Due to the importance of resource efficiency, the book also contains a selected set of optimization techniques for embedded systems, including special compilation techniques. The book closes with a brief survey on testing. Embedded System Design can be used as a text book for courses on embedded systems and as a source which provides pointers to relevant material in the area for PhD students and teachers. It assumes a basic knowledge of information processing hardware and software.

Courseware related to this book is available at <http://s12-www.cs.tu-dortmund.de/~marwedel>.

This book is designed for the 3rd semester gtu engineering students pursuing the probability and statistics (code 3130006). The crisp but complete explanation of topics will help the students easily understand the basic concepts. The tutorial approach (I.E. Teach by example) followed in the text will enable students develop a logical perspective to solving problems.

This revised and significantly expanded edition contains a rigorous examination of key concepts, new chapters and discussions within existing chapters, and added reference materials in the appendix, while retaining its classroom-tested approach to helping readers navigate through the deep ideas, vast collection of the fundamental methods of structural analysis. The authors show how to undertake the numerous analytical methods used in structural analysis by focusing on the principal concepts, detailed procedures and results, as well as taking into account the advantages and disadvantages of each method and sphere of their effective application. The end result is a guide to mastering the many intricacies of the range of methods of structural analysis. The book differentiates itself by focusing on extended analysis of beams, plane and spatial trusses, frames, arches, cables and combined structures; extensive application of influence lines for analysis of structures; simple and effective procedures for computation of deflections; introduction to plastic analysis, stability, and free and forced vibration analysis, as well as some special topics. Ten years ago, Professor Igor A. Karnovsky and Olga Lebed crafted a must-read book. Now fully updated, expanded, and titled *Advanced Methods of Structural Analysis (Strength, Stability, Vibration)*, the book is ideal for instructors, civil and structural engineers, as well as researches and graduate and post graduate students with an interest in perfecting structural analysis.

The fundamentals and implementation of digital electronics are essential to understanding the design and working of consumer/industrial electronics, communications, embedded systems, computers, security and military equipment. Devices used in applications such as these are constantly decreasing in size and employing more complex technology. It is therefore essential for engineers and students to understand the fundamentals, implementation and application principles of digital electronics, devices and integrated circuits. This is so that they can use the most appropriate and effective technique to suit their technical need. This book provides practical and comprehensive coverage of digital electronics, bringing together information on fundamental theory, operational aspects and potential applications. With worked problems, examples, and review questions for each chapter, *Digital Electronics* includes: information on number systems, binary codes, digital arithmetic, logic gates and families, and Boolean algebra; an in-depth look at multiplexers, de-multiplexers, devices for arithmetic operations, flip-flops and related devices, counters and registers, and data conversion circuits; up-to-date coverage of recent application fields, such as programmable logic devices, microprocessors, microcontrollers, digital troubleshooting and digital instrumentation. A comprehensive, must-read book on digital electronics for senior undergraduate and graduate students of electrical, electronics and computer engineering, and a valuable reference book for professionals and researchers.

Introduction to Process Engineering and Design covers basic principles to design alternate systems, develop process diagrams and select the best alternative to be adopted. Multiple industrial examples provided in the book will enhance the skills of the

readers for innovative designs. Salient Features: • Focuses on process design of chemical plants and equipment • State-of-the-art technique of supercritical extraction, reactive distillation, short path distillation discussed • Process Flow-charts are provided throughout the book

S. Chand's Physics, designed to serve as a textbook for students pursuing their engineering degree course, B.E. in Gujarat Technical University. The book is written with the singular objective of providing the students of GTU with a distinct source material as per the syllabus. The philosophy of presentation of the material in the book is based upon decades of classroom interaction of the authors. In each chapter, the fundamental concepts pertinent to the topic are highlighted and the in-between continuity is emphasized. Throughout the book attention is given to the proper presentation of concepts and practical applications are cited to highlight the engineering aspects. A number of problems are solved. New problems are included in order to expedite the learning process of students of all hues and to improve their academic performance. The fundamental concepts are emphasized in each chapter and the details are developed in an easy-to-follow style. Each chapter is divided into smaller parts and sub-headings are provided to make the reading a pleasant journey from one interesting topic to another important topic.

The revised and updated edition includes the latest developments in the field of ERP, information technology and new technologies that are changing the ERP landscape. Divided into eight sections, the book covers ERP Basics, ERP and Technology, ERP Implementation, Operation and Maintenance of the ERP system, Business Modules of ERP, ERP Market, Present and Future of ERP, ERP Resources, Case studies, Career guidance, Manufacturing perspective, etc.

The orientation towards vehicle maintenance led to the significant advancements in its engineering applications in the past few decades. With the advent of automation and electronics in automobiles, the study gained more momentum, which led vehicle maintenance and garage practice to emerge as a new discipline of automobile engineering. The present book is an attempt to reveal underlying principles and best practices in diagnostic procedures, services, repairs and overhauling of the vehicles. The key techniques and methods described with the help of diagrams and images make the book user-friendly and informative, enabling students to understand the concept easily. The text not only provides theoretical information, but also imparts practical knowledge on vehicle maintenance and repairing, emphasizing the role and function of service stations. The book deals with both conventional and non-conventional methods of repairing and overhauling. Primarily designed for the undergraduate and postgraduate students of automobile and mechanical engineering, the lucid and simple presentation of the book makes it useful for the students pursuing diploma in automobile engineering as well. It can be used as an automobile repair guide by vehicle owners for its step-by-step explanation of repair procedures, which help them to carry out repair and maintenance conveniently.

Taking a big-picture approach, Piping and Pipeline Engineering: Design, Construction, Maintenance, Integrity, and Repair elucidates the fundamental steps to any successful piping and pipeline engineering project, whether it is routine maintenance or a new multi-million dollar project. The author explores the qualitative details, calculations, and t This edition has been thoroughly revised and enlarged. It is still considered to be a must for all those sitting Civil

Engineering examinations.

This book provides a review of problems during design and construction on problematic soils. Design methods, site investigation, construction and analysis of the various improvement methods available are explained and discussed. Various regions may have different soils with geotechnical problems that differ from those faced in other regions. For example, in Southeast Asia, the common geotechnical problems are those associated with construction on soft clays and organic soils, while in the arid region of the Middle East, problems are generally associated with the desert soils. In the US, the problems are associated with organic soils, expansive and collapsing soils, and shale. Laterite and lateritic soils are especially problematic in Mexico. Similarly, in Europe, for example, the geotechnical problems are associated with loess (France), and organic soil (Germany). A detailed description of various methods of ground improvement has been provided in 11 chapters. Each chapter deals not only with a description of the method but also focuses on region-specific ground problems and suitable ground improvement techniques. Case studies have also been included. One general chapter is dedicated to site investigation, instrumentation, assessment and control. This book will be of value to students and professionals in the fields of civil and geotechnical engineering, as well as to soil scientists and engineering geologists.

The only book on the market that emphasizes machine design beyond the basic principles of AC and DC machine behavior AC electrical machine design is a key skill set for developing competitive electric motors and generators for applications in industry, aerospace, and defense. This book presents a thorough treatment of AC machine design, starting from basic electromagnetic principles and continuing through the various design aspects of an induction machine. Introduction to AC Machine Design includes one chapter each on the design of permanent magnet machines, synchronous machines, and thermal design. It also offers a basic treatment of the use of finite elements to compute the magnetic field within a machine without interfering with the initial comprehension of the core subject matter. Based on the author's notes, as well as after years of classroom instruction, Introduction to AC Machine Design: Brings to light more advanced principles of machine design—not just the basic principles of AC and DC machine behavior Introduces electrical machine design to neophytes while also being a resource for experienced designers Fully examines AC machine design, beginning with basic electromagnetic principles Covers the many facets of the induction machine design Introduction to AC Machine Design is an important text for graduate school students studying the design of electrical machinery, and it will be of great interest to manufacturers of electrical machinery.

ACE THE GMAT is based on a simple but powerful observation: Test-takers who score high on the GMAT exam do so primarily by understanding how to solve a finite number of the most important, recurring problems that appear on the

GMAT. What are these important, recurring problems? The answer to this question is the basis of this book. This manual provides in-depth analysis of over 200 all-star problems that are key to mastering the seven major GMAT problem types including Problem Solving, Data Sufficiency, Sentence Correction, Critical Reasoning, Reading Comprehension, Analytical Writing, and Integrated Reasoning. Apart from providing readers with answers and full explanations, a special feature of this book is that each problem is categorized by type (“classification”), rated by difficulty level (“chili rating”), and supplemented with a problem-solving strategy (“snapshot”). “Chance favors the prepared mind.” Whether you’re a candidate already enrolled in a test-prep course or are undertaking self-study, this guidebook will serve as a rigorous skill-building study guide to help you conquer the math, verbal, analytical writing, and integrated reasoning sections of the exam. Studying for the math and verbal sections of the GMAT exam requires some 100 hours of study time. This book’s content is conveniently divided into topics, which require two to three hours of study time per day. Total study time will vary between 80 to 120 hours for the entire 40 days. Solving (Official exam instructions for Problem Solving, Strategies and approaches, Review of basic math, Multiple-choice problems, Answers and explanations); Chapter 3 – Data Sufficiency (Official exam instructions for Data Sufficiency, Strategies and approaches, How are answers chosen in Data Sufficiency? How do the big seven numbers work? Multiple-choice problems, Answers and explanations); Chapter 4 – Sentence Correction (Official exam instructions for Sentence Correction, Strategies and approaches, Review of Sentence Correction, Multiple-choice problems, Answers and explanations); Chapter 5 – Critical Reasoning (Official exam instructions for Critical Reasoning, Strategies and approaches, Review of Critical Reasoning, Multiple-choice problems, Answers and explanations); Chapter 6 – Reading Comprehension (Official exam instructions for Reading Comprehension, Strategies and approaches, Review of Reading Comprehension, Answers and explanations); Chapter 7 – Analytical Writing Workshop (Official exam instructions for the Analytical Writing Assessment, Strategies and approaches, Review of Analytical Writing, Essay exercises, Outlines and proposed solutions); Chapter 8 – Integrated Reasoning Workshop (Official exam instructions for Integrated Reasoning, Strategies and approaches; Review of Integrated Reasoning with exercises, Answers and explanations); Appendix I – GMAT and MBA Informational Websites (Registering for the GMAT exam; MBA fairs & forums; MBA social networks; GMAT courses; Other GMAT & MBA websites; Information on business school rankings); Appendix II – Contact Information for the World’s Leading Business Schools (U.S. business schools; Canadian business schools; European business schools; Australian business schools; Asia-Pacific business schools; Latin and South American business schools; South African business schools); Quiz – Answers; On a Personal Note; Praise for Ace the GMAT. “Finally, a book that helps you master those learning skills that are critical to success on the GMAT.” —Linda B. Meehan, former Assistant Dean & Executive Director of Admissions,

Columbia Business School

Fans of Chris Ferrie's ABCs of Science, ABCs of Space, and Rocket Science for Babies will love this introduction to biology for babies and toddlers! This alphabetical installment of the Baby University baby board book series is the perfect introduction to science for infants and toddlers. It makes a wonderful science baby gift for even the youngest biologist. Give the gift of learning to your little one at birthdays, baby showers, holidays, and beyond! A is for Anatomy B is for Bacteria C is for Cell From anatomy to zoology, the ABCs of Biology is a colorfully simple introduction to STEM for babies and toddlers to a new biology concept for every letter of the alphabet. Written by two experts, each page in this biology primer features multiple levels of text so the book grows along with your little biologist. If you're looking for the perfect science toys for babies, STEAM books for teachers, or a wonderful baby board book to add to a special baby gift basket, look no further! ABCs of Biology offers fun early learning for your little scientist!

Applied Optics is designed to cater to the need of application part of optics for undergraduate students in Physics and Engineering in Indian Universities. The book covers the applications of optics for lasers, optical fibres, holography, special theory of relativity, particle nature of radiations and photoconductivity and photovoltaics. The text explains the concepts through extensive use of line drawings and gives full derivations of essential relations. The topics are dealt with in a well-organized sequence with proper explanations along with simple mathematical formulations. KEY FEATURES • Provides several Solved Numerical Problems to help students comprehend the concepts with ease • Includes Multiple Choice Questions and Theoretical Questions to help students check their understanding of the subject matter • Contains unsolved Numerical Problems with answers to build problem-solving skills • Provides Formulae at a Glance and Conceptual Questions with their answers for quick revision

The high-stakes game of the underworld has new faces, working for and against Dawood Ibrahim - the shadowy, manipulative figure that pulls the strings. Dawood's own deputy turned arch-rival Chhota Rajan, thug-turned-politician Arun Gawli, Amar (Raavan) Naik and his engineer brother Ashwin Naik, and a host of other characters, big and small, walk the pages of this compelling history of the Maharashtrian mobsters who were once dubbed 'amchi muley', 'our boys', by Shiv Sena chief Bal Thackeray. Equally fascinating are the stories of the famous - and infamous - policemen and 'encounter specialists' who took the gangs on with great success and not too many scruples. Violence and deceit one expects to read of, but the strength of this book is also its ability to capture the mundane - almost naive - beginnings of what very quickly became the organized crime and brutal vendettas that held Mumbai to ransom through the last decades of the twentieth century. Meticulously researched and thrillingly told by the acknowledged expert on the underworld, this is faster-paced than Dongri to Dubai, and even more chilling in its implications for India and the subcontinent.

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