

Power Plant Engineering Rk Rajput Free

A comprehensive and lucidly written book, "Strength of Materials" captures the syllabus of most major Indian Universities and competitive examinations as well. The book discusses everything under solids and its mechanics (such as providing different aspects of stresses) and provides the reader with a deeper interest in the subject – all within aptly formed chapters. It also contains typical examples (useful for students appearing in competitive examinations in particular and other students in general), highlights, objective type questions and a large number of unsolved examples for a complete grasp of the subject.

The CRC Handbook of Thermal Engineering, Second Edition, is a fully updated version of this respected reference work, with chapters written by leading experts. Its first part covers basic concepts, equations and principles of thermodynamics, heat transfer, and fluid dynamics. Following that is detailed coverage of major application areas, such as bioengineering, energy-efficient building systems, traditional and renewable energy sources, food processing, and aerospace heat transfer topics. The latest numerical and computational tools, microscale and nanoscale engineering, and new complex-structured materials are also presented. Designed for easy reference, this new edition is a must-have volume for engineers and researchers around the globe.

This book is intended to meet the requirements of the fresh engineers on the field to endow them with indispensable information, technical know-how to work in the power plant industries and its associated plants. The book provides a thorough understanding and the operating principles to solve the elementary and the difficult problems faced by the modern young engineers while working in the industries. This book is written on the basis of 'hands-on' experience, sound and in-depth knowledge gained by the authors during their experiences faced while working in this field. The problem generally occurs in the power plants during operation and maintenance. It has been explained in a lucid language.

For Students of B.E./B. Tech, Also Useful for Competitive Examinations

Heat and Mass Transfer : A Textbook for the Students Preparing for B.E., B.Tech., B.Sc. Engg., AMIE, UPSC (Engg. Services) and GATE Examinations

Thermal Engineering in Power Systems

Mechanical Engineering

Research and development in thermal engineering for power systems are of significant importance to many scientists who are engaged in research and design work in power-related industries and laboratories. This book focuses on variety of research areas including Components of Compressor and Turbines that are used for both electric power systems and aero engines, Fuel Cells, Energy Conversion, and Energy Reuse and Recycling Systems. To be competitive in today's market, power systems need to reduce the operating costs, increase capacity factors and deal with many other tough issues. Heat Transfer and fluid flow issues are of great significance and it is likely that a state-of-the-art edited book with reference to power systems will make a contribution for design and R&D engineers and the development towards sustainable energy systems.

Information on contemporary topics in power plant technology such as super critical boiler technology Practical approach to delineate complex topics with visual aids and representational schemes Exhaustive coverage of power generation from non-conventional sources of energy Ample solved examples, multiple-choice and exercise questions for practice.

This book on "Power System Engineering" has been written for students preparing for B.E., B.Tech., A.M.I.E. (I) Section B, U.P.S.C., and other Competitive Examinations. It comprises three parts: Part-I deals with "Generation", Part-II with "Transmission and Distribution" while Part-III includes "Switchgear and Protection". The book contains 28 chapters in all, at the end "Objective Type Question Bank" has also been added. Salient Features The presentation of the subject matter is very systematic and the language of the text is lucid, direct and easy to understand. Each chapter of book is saturated with much needed text supported by neat and self-explanatory diagrams to make the subject self-speaking to a great extent. A large number of solved examples, properly graded, have been added in various chapters to enable the students to attempt different types of questions in the examination without any difficulty. At the end of each chapter Highlights, Objective Type Questions, Theoretical Questions and Unsolved Examples have been added to make the book a complete and comprehensive unit in all respects.

Elements of Mechanical Engineering

Basic Mechanical Engineering

Design and Operation

The Electric Power Engineering Handbook

This comprehensive volume provides a complete, authoritative, up-to-date reference for all aspects of power plant engineering. Coverage ranges from engineering economics to coal and limestone handling, from design processes to plant thermal heat balances. Both theory and practical applications are covered, giving engineers the information needed to plan, design and operate power plants. Engineering is the culmination of experience of hundreds of engineers from Black & Veatch, a leading firm in the field for more than 80 years. The authors review all major power generating technologies, giving particular emphasis to current approaches. Special features of the book include: * More than 1000 figures and lines drawings that illustrate all aspects of the plants such as turbine-generators, feedwater heaters, condenser, and cooling towers. * Definitions and analyses of the features of various plant systems. * Discussions of promising future technologies. Power Plant Engineering will be the standard reference in the professional engineer's library as the source of information on steam power plant generation. In addition, it is a valuable reference for use by students preparing to enter the field.

This textbook has been designed for a one-semester course on Power Plant Engineering studied by both degree and diploma students of mechanical and electrical engineering. It effectively exposes the students to the basics of power generation involved in several energy conversion systems so that they gain comprehensive knowledge of the operation of various types of power plants. The book covers the fundamentals including the environmental impacts of power generation, the book acquaints the students with the working principles, design and operation of five conventional power plant systems, namely thermal, nuclear, hydroelectric, diesel and gas turbine. The economic factors of power generation with regard to estimation and prediction of load, plant design, performance and operation are also covered. The help of several solved numerical problems. The generation of electric power using renewable energy sources such as solar, wind, biomass, geothermal, tidal, fuel cells, magneto hydrodynamic, thermoelectric and thermionic systems, is discussed elaborately. The book is interspersed with solved problems for a sound understanding of the various aspects of power plant engineering. It is intended to help students with a thorough reinforcement of the concepts discussed.

This text is designed for courses in powerplant technology, powerplant engineering, and energy conversion offered in departments of mechanical engineering and nuclear engineering. It is also suitable as a supplement to courses in energy analysis offered in mechanical or nuclear engineering departments or energy analysis programs. It covers fossil, nuclear and renewable energy sources. It provides a complete and detailed understanding of the entire spectrum of power generation systems.

Power Plant Engineering

How a Nuclear Power Plant Really Works!

Design and Construction of Nuclear Power Plants

Thermal Power Plant

This second edition of Principles of Solar Engineering covers the latest developments in a broad range of topics of interest to students and professionals interested in solar energy applications. With the scientific fundamentals included, the book covers important areas such as heating and cooling, passive solar applications, detoxification and biomass energy conversion. This comprehensive textbook provides examples of methods of solar engineering from around the world and includes examples, solutions and data applicable to international solar energy issues. A solutions manual is available to qualified instructors.

A Textbook of Fluid Mechanics" provides a comprehensive coverage of the syllabus of Fluid Mechanics for different technical universities in India. Fluid mechanics has several categories, such as include Fluid kinematics, Fluid statics and Fluid dynamics. A total of 16 chapters followed by two special chapters of 'Universities' Questions (Latest) with Solutions' and 'GATE and UPSC Examinations' Questions with Answers/Solutions' after each unit also make it an excellent resource for aspirants of various entrance examinations.

"A chubby lab rat and a pretty blue bird speculate, exaggerate, and blame everything they don't understand about nuclear power on their arch-enemy – a cat named Penelope."--P. [4] of cover.

A textbook of power plant engineering

An Introduction to Thermal Power Plant Engineering and Operation

POWER PLANT ENGINEERING

Mechanical Engineering

Despite all the efforts being put into expanding renewable energy sources, large-scale power stations will be essential as part of a reliable energy supply strategy for a longer period. Given that they are low on CO2 emissions, many countries are moving into or expanding nuclear energy to cover their baseload supply. Building structures required for nuclear plants whose protective function means they are classified as safety-related, have to meet particular construction requirements more stringent than those involved in conventional construction. This book gives a comprehensive overview from approval aspects given by nuclear and construction law, with special attention to the interface between plant and construction engineering, to a building structure classification. All life cycle phases are considered, with the primary focus on execution. Accidental actions on structures, the safety concept and design and fastening systems are exposed to a particular treatment. Selected chapters from the German concrete yearbook are now being published in the new English "Beton-Kalender Series" for the benefit of an international audience. Since it was founded in 1906, the Ernst & Sohn "Beton-Kalender" has been supporting developments in reinforced and prestressed concrete. The aim was to publish a yearbook to reflect progress in "ferro-concrete" structures until – as the book's first editor, Fritz von Emperger (1862–1942), expressed it – the "tempestuous development" in this form of construction came to an end. However, the "Beton-Kalender" quickly became the chosen work of reference for civil and structural engineers, and apart from the years 1945–1950 has been published annually ever since.

Power Plant Performance discusses the different procedures and practices involved in the operation of power plants. The book is divided into four parts. Part I covers general considerations such as steam cycles; the sampling, analysis, and assessment of coal; and pumping – its related terms, the different types of pumps, and the determination of sizes and efficiency. Part II tackles the important measurements in power plants such as temperature, pressure, and gas and water flow. Part III deals with the operation of power plant components such as the boiler, turbine, and condensers. Part IV tackles other related topics such as steam turbine heat consumption tests; plant-operating parameters; and the costs of outages. The text is recommended for professionals involved in the development, maintenance, and operation of power plants, especially those who would like to be familiar with the basics.

Principles of Solar Engineering, Second Edition

Basic Electrical and Electronics Engineering

Power System Engineering

Nuclear Power

Useful book for GATE / IES / UPSC / PSUs and other competitive examinations. Latest objective type questions with answers. About 5000 objective type questions

▯ABOUT THE BOOK: Power Plant Engineering is a fast developing Branch of mechanical Engineering & its study is essential for the successful execution & maintenance of several mechanical Engineering. Works. The author has made an earnest attempt to bring out a book on the subject which may be recognized as a complete text book in all respects. ▯OUTSTANDING FEATURES: -All topics included in the chapters have been thoroughly described. -Every topic has been written in most logical sequence maintaining the natural flow to keep the students interested. -Topics of applications of Power plant engg. have been developed in sequence. The students would be able to get the fundamental concept about all topics included in power plant engineering upto the final year in mechanical engineering, -A large number of solved problems on different topics are included. -Numerical problems with answers, as well as theoretical questions have been included for the students to practice. -The coverage of topics in the book is based on syllabi of universities in Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Maharashtra, Punjab and West Bengal & other major universities. -Clear & simple figures have been included in each chapter for better understanding & also to enable students to draw / reproduce these in the examination easily. -In the entire book SI system of units is used. ▯RECOMMENDATIONS: A textbook for all Engineering Branches, Competitive Examination, ICS, and AMIE Examinations ▯ABOUT THE AUTHOR: G.K. PATHAK M.E., Senior Faculty Member, MIT-Pune-38 & D.K. CHAVAN B.E.(Mech.) Chartered Engineer Professor In Mechanical Engg. Department M.M.M College Of Engineering Pune-52 ▯BOOK DETAILS: ISBN : 978-81-89401-42-9 Pages: 1110 + 30 Edition: 2nd, Year -2017 Size: L-23.8 B-18.1 H-4.0 ▯PUBLISHED BY: STANDARD BOOK HOUSE Since 1960 Unit of Rajsons Publications Pvt Ltd Regd Office: 4262/3A Ground Floor Ansari Road Daryaganj New Delhi-110002 +91 011 43551185/43551085/43751128/23250212 Retail Office : 1705-A Nai Sarak Delhi-110006 011 23265506 Website: www.standardbookhouse.com A venture of Rajsons Group of Companies First Edition 2012; Reprints 2013, Second Revised Edition 2014 I. The Textbook entitled "Non- Conventional Energy Sources and Utilisation" has been written especially for the courses of B.E./B. Tech. for all Technical Universities of India. II. It deals exhaustively and symmetrically various topics on "Non -Conventional Renewable and Conventional Energy and Systems." III.. Salient Features of the book: ▯ Subject matter has been prepared in lucid, direct and easily understandable style. ▯ Simple diagrams and worked out examples have been given wherever necessary. ▯ At the end of each chapter, Highlights, Theoretical Questions, Unsolved examples have been added to make this treatise a complete comprehensive book on the subject. In this edition, the book has been thoroughly revised and a new Section on "SHORT ANSWER QUESTIONS" has been added to make the book still more useful to the students.

A Textbook of Fluid Mechanics LPSPE

Basic Electrical Engineering

A Textbook of Power Plant Engineering in SI Units

Utilisation of Electrical Power

This textbook has been designed for students of B.E./B.Tech Mechanical Engineering. It provides all the necessary information about power plants and steam power plants, nuclear and hydel power plants, diesel and gas turbine power plants, geothermal plants, ocean thermal plants, tidal power plants, and solar power plants, and the economics behind them. Key features of the book are: The text is supplemented with illustrated diagrams, tables, flow charts, and graphs wherever required, for clear understanding. A summary at the end of each chapter helps students to review material presented. Review questions and exercise problems have been designed to enhance the engineering skills of the student.

The astounding technological developments of our age depend on a safe, reliable, and economical supply of electric power. It stands central to continued innovations and particularly to the future of developing countries. Therefore, the importance of electric power engineering cannot be overstated, nor can the importance of this handbook to the power engineer. Unfortunately, there have had no comprehensive reference to help answer their questions quickly, concisely, and authoritatively-A one-stop reference written by electric power engineers specifically for electric power engineers.

A textbook of power plant engineeringin S. I. units for B.E.; B.Tech.; U.P.S.C. (Engg. Services); Section B-A.M.I.E. (India)Firewall MediaPower System EngineeringFirewall MediaPower Plant EngineeringNew Age International

A Text Book of Automobile Engineering

A Textbook of Power System Engineering

CRC Handbook of Thermal Engineering

A Textbook of Engineering Thermodynamics

This Text-Cum-Reference Book Has Been Written To Meet The Manifold Requirement And Achievement Of The Students And Researchers. The Objective Of This Book Is To Discuss, Analyses And Design The Various Power Plant Systems Serving The Society At Present And Will Serve In Coming Decades India In Particular And The World In General. The Issues Related To Energy With Stress And Environment Up To Some Extent And Finally Find Ways To Implement The Outcome.Salient Features# Utilization Of Non-Conventional Energy Resources# Includes Green House Effect# Gives Latest Information S In Power Plant Engineering# Include Large Number Of Problems Of Both Indian And Foreign Universities# Rich Contents. Lucid Manner

Thermal Power Plant: Design and Operation deals with various aspects of a thermal power plant, providing a new dimension to the subject, with focus on operating practices and troubleshooting, as well as technology and design. Its author has a 40-long association with thermal power plants in design as well as field engineering, sharing his experience with professional engineers under various training capacities, such as training programs for graduate engineers and operating personnel. Thermal Power Plant presents practical content on coal-, gas-, oil-, peat- and biomass-fueled thermal power plants, with chapters in steam power plant systems, start up and shut down, and interlock and protection. Its practical approach is ideal for engineering professionals. Focuses exclusively on thermal power, addressing some new frontiers specific to thermal plants Presents both technology and design aspects of thermal power plants, with special treatment on plant operating practices and troubleshooting Features a practical approach ideal for professionals, but can also be used to complement undergraduate and graduate studies

The entire bookhas been thoroughly revised and a large number of solved examples under heading Additional/Typical Worked Examples (Questions selected from various Universities and Competitive Examinations)have been added at the end of the book.

Electrical Engineering

Engineering Thermodynamics

in S. I. units for B.E.; B.Tech.; U.P.S.C. (Engg. Services); Section B-A.M.I.E. (India)

Objective Type Questions in Mechanical Engineering