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BASIC CIVIL AND MECHANICAL ENGINEERING.

Electronics Engineering

As Per Anna University Syllabus for Mechanical, Civil, Metallurgical, Bio - Technology, Chemical, Textile, Leather, Polymer Engineering

Kinematics of Machinery

Technical Publications **Kinematics of Machinery is the branch of engineering science which deals with the study of relative motion between the various parts of a machine and the forces which act on them. It gives information about the basic concepts and layout of linkages in the assembly of a system or a machine. The subject provides information about the principles in analysing the assembly with respect to the displacement, velocity and acceleration at any point in a link of a mechanism. This book gives technique to find velocity and acceleration of different mechanisms by graphical and analytical methods. It also includes the basic concepts of toothed gearing and kinematics of gear trains and the effect of friction in motion transmission and in machine components. My hope is that this book, through its careful explanations of concepts, practical examples and figures bridges the gap between knowledge and proper application of that knowledge.**

Basic Electrical and Electronics Engineering

Firewall Media

Process, Planning And Cost Estimation

New Age International **This Edition Of Process Planning And Cost Estimation Based On The Latest Syllabus For B.E/B.Tech. Mechanical And Production Engineering For Anna University As Well As Other Universities. It Is A Valuable Assert For Entrepreneurs, Training Managers Of Various Mechanical Workshops And Diploma Students.This Book Is An Attempt To Provide All Necessary Information About Process Planning And Cost Estimation. The Subject Matter Has Been Presented In A Simple And Systematic Way With Numerous Diagrams And Illustrations So As To Enable Thorough Understanding Of The Topics.**

Basic civil and mechanical engineering

Standard Handbook of Powerplant Engineering

McGraw Hill Professional **Extensively revised and updated, this new edition of a classic resource provides powerplant engineers with a full range of information from basic operations to leading-edge technologies, including steam generation, turbines and diesels, fuels and fuel handling, pollution control, plant electrical systems, and instrumentation and control. New material covers various energy resources for power generation, nuclear plant systems, hydroelectric power stations, alternative and cogeneration energy plants, and environmental controls. With over 600 drawings, diagrams, and photographs, it offers engineers and technicians the information needed to keep powerplants operating smoothly into the 21st century.**

Professional Ethics and Human Values

Firewall Media

Basic Electronics for Scientists and Engineers

Cambridge University Press **Ideal for a one-semester course, this concise textbook covers basic electronics for undergraduate students in science and engineering. Beginning with the basics of general circuit laws and resistor circuits to ease students into the subject, the textbook then covers a wide range of topics, from passive circuits through to semiconductor-based analog circuits and basic digital circuits. Using a balance of thorough analysis and insight, readers are shown how to work with electronic circuits and apply the techniques they have learnt. The textbook's structure makes it useful as a self-study introduction to the subject. All mathematics is kept to a suitable level, and there are several exercises throughout the book. Password-protected solutions for instructors, together with eight laboratory exercises that parallel the text, are available online at www.cambridge.org/Eggleston.**

A Textbook of Engineering Materials and Metallurgy

[Firewall Media](#)

Data Interpretation & Data Sufficiency

[Arihant Publications India limited](#)

Engineering Physics(for Anna University),1/e

[Pearson Education India](#)

Design of Jigs, Fixtures and Press Tools

[Springer Nature](#) This textbook is aimed at providing an introduction to the subject for undergraduate students studying mechanical and manufacturing engineering at most universities. Many of the universities prescribe a syllabus that contains both Design of Jigs and Fixtures, and Design of Press Tools in a single semester course. Keeping the above in mind, this book is designed in two parts. Part-I deals with Jigs and Fixtures and Part-II is earmarked exclusively for the study of Press Tools. Both these subjects are built progressively in successive chapters. A separate appendix, in each part, provides short answer questions with answers, which will help the students in clarifying doubts and strengthen their knowledge. The explanatory notes and illustrations provided in the book will serve as an aid for learning. End-of-chapter questions and answers will prove useful for self study. This textbook will be extremely useful for the students and practicing engineers studying mechanical, manufacturing, and production engineering.

Principles of Composite Material Mechanics

[CRC Press](#) Principles of Composite Material Mechanics covers a unique blend of classical and contemporary mechanics of composites technologies. It presents analytical approaches ranging from the elementary mechanics of materials to more advanced elasticity and finite element numerical methods, discusses novel materials such as nanocomposites and hybrid multiscale composites, and examines the hygrothermal, viscoelastic, and dynamic behavior of composites. This fully revised and expanded Fourth Edition of the popular bestseller reflects the current state of the art, fresh insight gleaned from the author's ongoing composites research, and pedagogical improvements based on feedback from students, colleagues, and the author's own course notes. New to the Fourth Edition New worked-out examples and homework problems are added in most chapters, bringing the grand total to 95 worked-out examples (a 19% increase) and 212 homework problems (a 12% increase) Worked-out example problems and homework problems are now integrated within the chapters, making it clear to which section each example problem and homework problem relates Answers to selected homework problems are featured in the back of the book Principles of Composite Material Mechanics, Fourth Edition provides a solid foundation upon which students can begin work in composite materials science and engineering. A complete solutions manual is included with qualifying course adoption.

Publisher's Monthly

India Since Independence

[Penguin UK](#) A thorough and incisive introduction to contemporary India The story of the forging of India, the world's largest democracy, is a rich and inspiring one. This volume, a sequel to the best-selling India's Struggle for Independence, analyses the challenges India has faced and the successes it has achieved, in the light of its colonial legacy and century-long struggle for freedom. The book describes how the Constitution was framed, as also how the Nehruvian political and economic agenda and basics of foreign policy were evolved and developed. It dwells on the consolidation of the nation, examining contentious issues like party politics in the Centre and the states, the Punjab problem, and anti-caste politics and untouchability. This revised edition offers a scathing analysis of the growth of communalism in India and the use of state power in furthering its cause. It also documents the fall of the National Democratic Alliance in the 2004 General Elections, the United Progressive Alliance's subsequent rise to power and the Indo-US Nuclear Deal that served to unravel the political consensus at the centre. Apart from detailed analyses of Indian economic reforms since 1991 and wide-ranging land reforms and the Green Revolution, this new edition includes an overview of the Indian economy in the new millennium. These, along with objective assessments of Jawaharlal Nehru, Indira Gandhi, Jayaprakash Narayan, Lal Bahadur Shastri, Rajiv Gandhi, Vishwanath Pratap Singh, Atal Bihari Vajpayee and Manmohan Singh, constitute a remarkable overview of a nation on the move.

Electrical Engineering

[Firewall Media](#)

FUNDAMENTALS OF HEAT AND MASS TRANSFER

[PHI Learning Pvt. Ltd.](#) "This comprehensive text on the basics of heat and mass transfer provides a well-balanced treatment of theory and mathematical and empirical methods used for solving a variety of engineering problems. The book helps students develop an intuitive and practical understanding of the processes by emphasizing the underlying physical phenomena involved. Focusing on the requirement to clearly explain the essential fundamentals and impart the art of problem-solving, the text is written to meet the needs of undergraduate students in mechanical engineering, production engineering, industrial engineering, auto-mobile engineering, aeronautical engineering, chemical engineering, and biotechnology.

A Textbook of Engineering Mathematics (For First Year ,Anna University)

[Laxmi Publications](#)

Optical Networks

A Practical Perspective

[Morgan Kaufmann](#) This fully updated and expanded second edition of *Optical Networks: A Practical Perspective* succeeds the first as the authoritative source for information on optical networking technologies and techniques. Written by two of the field's most respected individuals, it covers componentry and transmission in detail but also emphasizes the practical networking issues that affect organizations as they evaluate, deploy, or develop optical solutions. This book captures all the hard-to-find information on architecture, control and management, and other communications topics that will affect you every step of the way—from planning to decision-making to implementation to ongoing maintenance. If your goal is to thoroughly understand practical optical networks, this book should be your first and foremost resource. * Focuses on practical, networking-specific issues: everything you need to know to implement currently available optical solutions. * Provides the transmission and component details you need to understand and assess competing technologies. * Offers updated and expanded coverage of propagation, lasers and optical switching technology, network design, transmission design, IP over WDM, wavelength routing, optical standards, and more.

Shortcuts in Reasoning (Verbal, Non-Verbal, Analytical & Critical) for Competitive Exams 2nd Edition

[Disha Publications](#) The thoroughly revised & updated 2nd edition of Disha's Bestseller book 'Shortcuts in Reasoning (Verbal, Non-Verbal & Analytical) will help aspirants in learning the various tips and tricks required to crack the Reasoning section of the various Competitive Exams. The book emphasizes on the short-cut methods through which one can solve any problem before time. Thus, the book not only enhances your efficiency but also helps you to master the subject. Each chapter covers theory involving shortcut approaches and formula followed by Solved Examples which depicts the use of the shortcuts. The book is further supported by a Practice Exercise with 300+ MCQs with detailed Solutions The book has been divided into 30 Chapters covering all types of Reasoning - Verbal, Non-Verbal, Analytical & Critical. The book will prove to be an asset for all competitive examinations like UPSC(IAS Prelim), Banking, CLAT, SSC, Insurance, Railway Recruitment Board Examinations, CBI, MBA, Sub-Inspectors of Police, CPO and various other competitive examinations.

Engineering Materials and Metallurgy

[S. Chand Publishing](#) This treatise on *Engineering Materials and Metallurgy* contains comprehensive treatment of the matter in simple, lucid and direct language and envelopes a large number of figures which reinforce the text in the most efficient and effective way. The book comprises five chapters (excluding basic concepts) in all and fully and exhaustively covers the syllabus in the above mentioned subject of 4th Semester Mechanical, Production, Automobile Engineering and 2nd semester Mechanical disciplines of Anna University.

Prestressed Concrete Design

[CRC Press](#) Prestressed concrete is widely used in the construction industry in buildings, bridges, and other structures. The new edition of this book provides up-to-date guidance on the detailed design of prestressed concrete structures according to the provisions of the latest preliminary version of Eurocode 2: Design of Concrete Structures, DD ENV 1992-1-1: 1992. The emphasis throughout is on design - the problem of providing a structure to fulfil a given purpose - but fundamental concepts are also described in detail. All major topics are dealt with, including prestressed flat slabs, an important and growing application in the design of buildings. The text is illustrated throughout with worked examples and problems for further study. Examples are given of computer spreadsheets for typical design calculations. *Prestressed Concrete Design* will be a valuable guide to practising engineers, students and research workers.

Biochemical Engineering and Biotechnology

[Elsevier](#) *Biochemical Engineering and Biotechnology, 2nd Edition*, outlines the principles of biochemical processes and explains their use in the manufacturing of every day products. The author uses a direct approach that should be very useful for students in following the concepts and practical applications. This book is unique in having many solved problems, case studies, examples and demonstrations of detailed experiments, with simple design equations and required calculations. Covers major concepts of biochemical engineering and biotechnology, including applications in bioprocesses, fermentation technologies, enzymatic processes, and membrane separations, amongst others Accessible to chemical engineering students who need to both learn, and apply, biological knowledge in engineering principals Includes solved problems, examples, and demonstrations of detailed experiments with simple design equations and all required calculations Offers many graphs that present actual experimental data, figures, and tables, along with explanations

Computer Aided Manufacturing

[Firewall Media](#)

Fundamentals of Computing and Programming in C

[Vikas Publishing House](#) *Fundamentals of Computing and Programming in C* is specifically designed for first year engineering students covering the syllabus of various universities. It provides a comprehensive introduction to computers and programming using C language. The topics are covered sequentially and blended with examples to enable students to understand the subject effectively and imbibe the logical thinking required for software industry applications. KEY FEATURES • Foundations of computers • Contains logical sequence of examples for easy learning • Efficient method of program design • Plenty of solved examples • Covers simple and advanced programming in C

Total Quality Management

[New Age International](#) This Book Explores The Topics Included In The Syllabus Of Anna University Extensively. A Reference Table On The Factors For Quality Control Charts, Numerical Examples For Each Control Chart, The Questions For Short Answers, And A Few Web Site Addresses Have Been Included To Obtain And Sustain The Interest Of The Student Community And The Teaching Fraternity. In This Second Edition, A Chapter Was Added With Details On Topics Such As Quality Circle, Zero Defects, Just In Time, Kanban And Poka Yoke To Cater For The Expectations Of The Students As Well As Teachers. The Details On 5S, Yy Analysis, Five W S And Two H S Analysis And Brainstorming Methodology Have Been Enlarged With Examples. Twenty-Three Case Studies Have Been Added In This Edition To Extend The Scope And Knowledge Of The Student Community. In Addition To This, Twelve Numerical Problems On Different Aspects Of Spc And Six Sigma As Illustrative Examples And The Enriched Question Bank Have Been Added For Clarity In Teaching And Learning. This Book Can Be Used As A Textbook By All The Final Year B.E./B.Tech. Students Of Anna University.

Theory of Machines

[Pearson Education India](#) *Theory of Machines* is a comprehensive textbook for undergraduate students in Mechanical, Production, Aeronautical, Civil, Chemical and Metallurgical Engineering. It provides a clear exposition of the basic principles and reinforces the development of problem-solving skills with graded end-of-chapter problems. The book has been thoroughly updated and revised with fresh examples and exercises to conform to the syllabi requirements of the universities across the country. The book features an introduction and chapter outline for each chapter; it contains 265 multiple choice questions at the end of the book; over 300 end-of-chapter exercises; over 150 solved examples interspersed throughout the text and a glossary for ready reference to the terminology.

MECHATRONICS: INTEGRATED MECHANICAL ELECTRONIC SYSTEMS (With CD)

[John Wiley & Sons Market_Desc](#): This textbook is written for undergraduate students embarking on introductory course in Mechatronics and is also a reference book for engineers, and other practicing professionals, who are keen on understanding the principles of Mechatronic systems and engineering. Special Features: · Text presented in an integrated and lucid style.· Design of discrete control systems using fluid power circuits and PLCs explained.· User-friendly book with simple explanations and illustrations.· Many worked out examples and case studies.· Numerous illustrations, review questions, problems and exercises given.· Appendices, solved question and answers included in companion CD.· Instructor Manual CD with Powerpoint presentations and questionnaire to be made available in December 2008. About The Book: This book integrates the principles of electrical and electronic engineering with Mechatronic system application in a simple manner, and is designed for both mechanical/industrial engineers. This book enables one to design and select analog and digital circuits, microprocessor-based components, mechanical devices, sensors and actuators, and control devices to design modern mechatronic systems. Mechatronics - Integrated Mechanical Electronic System, consists of 16 chapters and each chapter begins with learning objectives and a brief introduction. Topics are then divided into labeled sections with explanations, examples, along with appropriate practical applications. A variety of solved problems with step by step solutions are included. Each chapter ends with key terms, summary of the chapter, objective type questions and exercises.

Automobile Mechanics Automobile Mechanics

[KHANNA PUBLISHING HOUSE](#) The book is designed to become a valid source of information to assist the student both in and out of the classroom to attain his or her objective. the structure of the text book is as follows: Chapter 1 is an introduction to the book, covering the basic information on automobiles. Chapter 2 deals with engines and their auxiliary units. Chapters 3-10 cover several aspects of design of automobile components - SI system, background mathematics and advice on problem solving, particularly exam questions. Chapters 11-15 cover essential theory part of support system for vehicles. Numerous designs and fully worked problems are provided at the end of the chapter. It is expected that as the student works through the examples and problems, he or she will develop a greater understanding of the mathematics required for engineering. To help the student develop a sound grasp of the principles covered there are many diagrams, notes and applications as an aid to develop knowledge and facilitate understanding.

SSC English Topic-wise LATEST 35 Solved Papers (2010-2016)

[Disha Publications](#) Topic-wise Solved Paper SSC English consists of past solved papers of SSC CGL, 10+2 CHSL, Sub-Inspector, Multi Tasking, and Stenographer from 2010 to 2016. The coverage of the papers has been kept RECENT (2010 to 2016) as they actually reflect the changed pattern of the SSC exams. Thus the papers prior to 2010 have not been included in the book. In all there are 35 Question papers from 2010 to 2016 which have been provided topic-wise along with detailed solutions. Practicing these questions, aspirants will come to know about the pattern and toughness of the questions asked in the examination. The strength of the book lies in the originality of its question papers and Errorless Solutions. The solution of each and every question is provided in detail (step-by-step) so as to provide 100% concept clarity to the students. The book will make the aspirants competent enough to crack the uncertainty of success in the Entrance Examination.

Micro Electro Mechanical System Design

[CRC Press](#) It is challenging at best to find a resource that provides the breadth of information necessary to develop a successful micro electro mechanical system (MEMS) design. Micro Electro Mechanical System Design is that resource. It is a comprehensive, single-source guide that explains the design process by illustrating the full range of issues involved,

ENGINEERING PRACTICES

[PHI Learning Pvt. Ltd.](#) This book helps students acquire hands-on skills in the following areas of workshop practices: Plumbing and carpentry. Arc and gas welding, sheet metal work and machining operations. Smithy, foundry, machine assembly and fitting operations. Methods of household and industrial wiring, use of measuring instruments, identification of electronic components and devices, and the study of their characteristics through experimentation, soldering of electronic components, etc. The book is intended for the first-year undergraduate engineering students of all disciplines. KEY FEATURES : Includes a large number of figures and examples for easy understanding of operations of tools and equipment. Offers viva questions with answers for practical examination.

Thermodynamics for Engineers, 2nd Edition

[CRC Press](#) Aspiring engineers need a text that prepares them to use thermodynamics in professional practice. Thermodynamics instructors need a concise textbook written for a one-semester undergraduate course—a text that foregoes clutter and unnecessary details but furnishes the essential facts and methods. Thermodynamics for Engineers, Second Edition continues to fill both those needs. Paying special attention to the learning process, the author has developed a unique, practical guide to classical thermodynamics. His approach is remarkably cohesive. For example, he develops the same example through his presentation of the first law and both forms of the second law—entropy and exergy. He also unifies his treatments of the conservation of energy, the creation of entropy, and the destruction of availability by using a balance equation for each, thus emphasizing the commonality between the laws and allowing easier comprehension and use. This Second Edition includes a new chapter on thermodynamic property relations and gives updated, expanded problem sets in every chapter. Accessible, practical, and cohesive, the text builds a solid foundation for advanced engineering studies and practice. It exposes students to the "big picture" of thermodynamics, and its streamlined presentation allows glimpses into important concepts and methods rarely offered by texts at this level. What's New in This Edition: Updated and expanded problem sets New chapter on thermodynamic property relations Updated chapter on heat transfer Electronic figures available upon qualifying course adoption End-of-chapter poems to summarize engineering principles

A Textbook of Strength of Materials

(in S.I. Units)

[Laxmi Publications](#)

Manufacturing Technology - II

[Firewall Media](#)

CAD/CAM/CIM

New Age International The Technology Of Cad/Cam/Cim Deals With The Creation Of Information At Different Stages From Design To Marketing And Integration Of Information And Its Effective Communication Among The Various Activities Like Design, Product Data Management, Process Planning, Production Planning And Control, Manufacturing, Inspection, Materials Handling Etc., Which Are Individually Carried Out Through Computer Software. Seamless Transfer Of Information From One Application To Another Is What Is Aimed At. This Book Gives A Detailed Account Of The Various Technologies Which Form Computer Based Automation Of Manufacturing Activities. The Issues Pertaining To Geometric Model Creation, Standardisation Of graphics Data, Communication, Manufacturing Information Creation And Manufacturing Control Have Been Adequately Dealt With. Principles Of Concurrent Engineering Have Been Explained And Latest Software In The Various Application Areas Have Been Introduced. The Book Is Written With Two Objectives To Serve As A Textbook For Students Studying Cad/Cam/Cim And As A Reference Book For Professional Engineers.

FUNDAMENTALS OF COMBUSTION

PHI Learning Pvt. Ltd. Designed for both undergraduate and postgraduate students of mechanical, aerospace, chemical and metallurgical engineering, this compact and well-knitted textbook provides a sound conceptual basis in fundamentals of combustion processes, highlighting the basic principles of natural laws. In the initial part of the book, chemical thermodynamics, kinetics, and conservation equations are reviewed extensively with a view to preparing students to assimilate quickly intricate aspects of combustion covered in later chapters. Subsequently, the book provides extensive treatments of 'pre-mixed laminar flame', and 'gaseous diffusion flame', emphasizing the practical aspects of these flames. Besides, liquid droplet combustion under quiescent and convective environment is covered in the book. Simplified analysis of spray combustion is carried out which can be used as a design tool. An extensive treatment on the solid fuel combustion is also included. Emission combustion systems, and how to control emission from them using the latest techniques, constitute the subject matter of the final chapter. Appropriate examples are provided throughout to foster better understanding of the concepts discussed. Chapter-end review questions and problems are included to reinforce the learning process of students.

NUMERICAL METHODS FOR ENGINEERS

Dr. R.NAGENDRAN This book spreads into Five Chapters Covering the various aspects on Numerical Methods for Engineers. This book Cover's the syllabus of Anna University B.E., Courses in Mechanical Engineering, Automobile Engineering, Civil Engineering, Production Engineering, Aeronautical Engineering and Electrical and Electronics Engineering.

Manufacturing Technology - I

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