

## Technical Publications Engineering Pune University

This book presents the proceedings of the Third International Conference on Electrical Engineering and Control (ICEECA2017). It covers new control system models and troubleshooting tips, and also addresses complex system requirements, such as increased speed, precision and remote capabilities, bridging the gap between the complex, math-heavy controls theory taught in formal courses, and the efficient implementation required in real-world industry settings. Further, it considers both the engineering aspects of signal processing and the practical issues in the broad field of information transmission and novel technologies for communication networks and modern antenna design. This book is intended for researchers, engineers, and advanced postgraduate students in control and electrical engineering, computer science, signal processing, as well as mechanical and chemical engineering.

This textbook provides comprehensive introduction to scripting languages that are used for creating web based applications. The book is divided into five different sections. In the first section the book introduces web site basics, HTTP, HTML5 and CSS3. The second and third section is based on client side and server side scripting. In these sections, the client side scripting such as JavaScript, DHTML and JSON is introduced. The sever side programming includes Servlet programming and JSP. In this section Java Database Connectivity is introduced and Simple Web Applications based on

database connectivity have been developed. The fourth section deals with PHP and XML. The last section includes introduction to AJAX and Web Services. A database driven web service is developed and explained in step by step manner. At the end of the book some sample programs based on various scripting languages are given. The books helps the reader to learn the internet programming in the most lucid way. Various programming examples discussed in this book will motivate the students to learn the subject.

The book presents comprehensive coverage of fundamental computer graphics concepts in a simple, lucid, and systematic way. It also introduces the popular OpenGL programming language with illustrative examples of the various functions in OpenGL. The book teaches you a wide range of exciting topics such as graphics devices, scan conversion, polygons, segments, 2D and 3D transformations, windowing and clipping, illumination models and shading algorithms, hidden line elimination algorithms, curves and fractals. The book also focuses on modern concepts like animation and gaming. This book discusses the use of converged technology, a rapidly growing area that enhancements smart devices, communication, Internet of things (IoT), and augmented reality (AR). The book also explores the need for convergence of IoT and AR for various purposes, like personalized services, context awareness, and bridging the gap between the physical and digital world. Furthermore, it examines the implementation of IoT and AR in use cases to define pathways that allow application developers to design

modern solutions to satisfy requirements like scalability, abstraction and security. Featuring an introduction, and covering sensing techniques, and effective architecture in AR-based IoT real-time use cases, the book also addresses the issues and challenges in designing standard architecture and middleware to support diverse applications. Given its scope, it is a valuable resource for teachers and students in engineering, as well as researchers, developers, and users working in multi-disciplinary areas.

Quality of Work-Life During Pandemic

Internet of Things Integrated Augmented Reality

Fundamentals and Applications

Computer Graphics

*Latest JEE (Main) Four Question Paper 2021- Fully solved Previous Years' (2019-2020) Exam Questions to facilitate focused study Mind Map: A single page snapshot of the entire chapter for longer retention Mnemonics to boost memory and confidence 15 Sample Question Papers based on the latest pattern with detailed explanations Oswaal QR Codes: Easy to scan QR codes for online concept based content Subject-wise - Appendix available in QR format. Tips to crack JEE*

*(Main) Trend Analysis: Chapter-wise*

*Mechanical engineering, as its name suggests, deals with the mechanics of operation of mechanical systems. This is the branch of engineering which includes design, manufacturing, analysis and maintenance of mechanical systems. It combines engineering physics and mathematics principles with material science to design, analyse, manufacture and maintain mechanical systems. This book covers the field requires an understanding of core areas including thermodynamics, material science, manufacturing, energy conversion systems, power transmission systems and mechanisms. This book includes basic knowledge of various mechanical systems used in day to day life. 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.*

*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.*

*The book proposes new technologies and discusses future solutions for design infrastructure for ICT. The book contains high quality submissions presented at Second International Conference on Information and Communication Technology for Sustainable Development (ICT4SD - 2016) held at Goa, India during 1 - 2 July, 2016. The conference stimulates the cutting-edge research discussions among many academic pioneering researchers, scientists, industrial engineers, and students from all around the world. The topics covered in this book also focus on innovative issues at international level by bringing together the experts from different*

*countries.*

*Oswaal Chemistry JEE (Mains) Solved Papers + JEE Main Mock Test  
15 Sample Question Papers (Set of 2 Books) (For 2022 Exam)*

*Handbook of Research on Applied Intelligence for Health and Clinical Informatics*

*Information and Communication Technology for Competitive Strategies*

*FUNDAMENTALS OF TRIBIOLOGY*

*Advanced Control Engineering Methods in Electrical Engineering Systems*

*Review of the Research Program of the U.S. DRIVE Partnership: Fifth Report follows on four previous reviews of the FreedomCAR and Fuel Partnership, which was the predecessor of the U.S. DRIVE Partnership. The U.S. DRIVE (Driving Research and Innovation for Vehicle Efficiency and Energy Sustainability) vision, according to the charter of the Partnership, is this: American consumers have a broad range of affordable personal transportation choices that reduce petroleum consumption and significantly reduce harmful emissions from the transportation sector. Its mission is as follows: accelerate the development of pre-competitive and innovative technologies to enable a full range of efficient and clean advanced light-duty vehicles (LDVs), as well as related energy infrastructure. The Partnership focuses on precompetitive research and development*

*(R&D) that can help to accelerate the emergence of advanced technologies to be commercialization-feasible. The guidance for the work of the U.S. DRIVE Partnership as well as the priority setting and targets for needed research are provided by joint industry/government technical teams. This structure has been demonstrated to be an effective means of identifying high-priority, long-term precompetitive research needs for each technology with which the Partnership is involved. Technical areas in which research and development as well as technology validation programs have been pursued include the following: internal combustion engines (ICEs) potentially operating on conventional and various alternative fuels, automotive fuel cell power systems, hydrogen storage systems (especially onboard vehicles), batteries and other forms of electrochemical energy storage, electric propulsion systems, hydrogen production and delivery, and materials leading to vehicle weight reductions.*

*First chapter deals with probability and random variable discussion. CDF, PDF and two dimensional random variables are discussed. Second chapter presents various useful probability distribution models. It also presents useful statistical averages such as mean, moments, variance, etc. Third chapter presents basic statistics concepts. Mean, median, mode, moments, variance, Kurtosis, skewness are discussed. Correlation, regression, Chebyshev inequality are also presented. Fourth chapter discusses formation of hypothesis, tests of significance and chi-square distribution. Last chapter presents curve fitting using straight line and second degree parabola.*

*Presents various facets of laser surface treatment, emphasizing technologies that are expected to be important soon. The topics include fundamentals and types, surface*

*texturing, heat treatment, metallic and intermetallic coating, the laser deposition of ceramic coatings, polymeric coatings, the cor*

*The first book on Prognostics and Health Management of Electronics Recently, the field of prognostics for electronic products has received increased attention due to the potential to provide early warning of system failures, forecast maintenance as needed, and reduce life cycle costs. In response to the subject's growing interest among industry, government, and academic professionals, this book provides a road map to the current challenges and opportunities for research and development in Prognostics and Health Management (PHM). The book begins with a review of PHM and the techniques being developed to enable a prognostics approach for electronic products and systems. building on this foundation, the book then presents the state of the art in sensor systems for in-situ health and usage monitoring. Next, it discusses the various models and algorithms that can be utilized in PHM. Finally, it concludes with a discussion of the opportunities in future research. Readers can use the information in this book to: Detect and isolate faults Reduce the occurrence of No Fault Found (NFF) Provide advanced warning of system failures Enable condition-based (predictive) maintenance Obtain knowledge of load history for future design, qualification, and root cause analysis Increase system availability through an extension of maintenance cycles and/or timely repair actions Subtract life cycle costs of equipment from reduction in inspection costs, down time, and inventory Prognostics and Health Management of Electronics is an indispensable reference for electrical engineers in manufacturing, systems maintenance, and management, as well as design engineers in all areas of electronics.*

*Internet Programming*

*Oswaal Mathematics Topper's Handbook + JEE Main Mock Test 15 Sample Question Papers (Set of 2 Books) (For 2022 Exam)*

*Handbook of Research on Computational Intelligence Applications in Bioinformatics  
Electrical Machines - I*

*WAVE PROPAGATION AND ANTENNA ENGINEERING*

**The importance of various electrical machines is well known in the various engineering fields. The book provides comprehensive coverage of the magnetic circuits, magnetic materials, single and three phase transformers and d.c. machines. The book is structured to cover the key aspects of the course Electrical Machines - I. The book starts with the explanation of basics of magnetic circuits, concepts of self and mutual inductances and important magnetic materials. Then it explains the fundamentals of single phase transformers including the construction, phasor diagram, equivalent circuit, losses, efficiency, methods of cooling, parallel operation and autotransformer. The chapter on three phase transformer provides the detailed discussion of construction, connections, phasor groups, parallel operation, tap changing transformer and three winding transformer. The various testing methods of transformers are also incorporated in the book. The book further explains the concept of electromechanical energy conversion including the discussion of singly**

**and multiple excited systems. Then the book covers all the details of d.c. generators including construction, armature reaction, commutation, characteristics, parallel operation and applications. The book also includes the details of d.c. motors such as characteristics, types of starters, speed control methods, electric braking and permanent magnet d.c. motors. Finally, the book covers the various testing methods of d.c. machines including Swinburne's test, brake test, retardation test and Hopkinson's test. The book uses plain, lucid language to explain each topic. The book provides the logical method of explaining the various complicated topics and stepwise methods to make the understanding easy. Each chapter is well supported with necessary illustrations, self-explanatory diagrams and variety of solved problems. All the chapters are arranged in a proper sequence that permits each topic to build upon earlier studies. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.**

**Mechanical engineering, as its name suggests, deals with the mechanics of operation of mechanical systems. This is the branch of engineering which includes design, manufacturing, analysis and maintenance of mechanical systems. It combines engineering physics and mathematics principles with material science to design, analyse, manufacture and maintain mechanical systems. This book covers the field**

**requires an understanding of core areas including thermodynamics, material science, manufacturing, energy conversion systems, power transmission systems and mechanisms. 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.**

**This book is designed to serve as a comprehensive resource on cellular confinement systems or geocells, covering technologies and their applications in geotechnical engineering. The book discusses all aspects of geocells and related technologies, and covers the subjects from conceptual basics to recent advances. The chapters of this book are written by renowned international experts and its contents include detailed case studies from both academic and industry experts. This book is a one-stop reference work for academicians, students, and practicing engineers in the global geotechnical community.**

**Engineering Mechanics Technical Publications**

**Oswaal Mathematics JEE (Mains) Solved Papers + JEE Main Mock Test 15 Sample Question Papers (Set of 2 Books) (For 2022 Exam)**

**Building Drawing with an integrated approach to Built Environment (6th Edition)**

**Information and Communication Technology for Sustainable Development**

**Data Analysis and Mathematical Modeling**

## **Prognostics and Health Management of Electronics**

Engineering mechanics is the branch of the physical science which describes the response of bodies or systems of bodies to external behaviour of a body, in either a beginning state of rest or of motion, subjected to the action of forces. It bridges the gap between physical theory and its application to technology. It is used in many fields of engineering, especially mechanical engineering and civil engineering. Much of engineering mechanics is based on Sir Issac Newton's laws of motion. Within the practical sciences, engineering mechanics is useful in formulating new ideas and theories, discovering and interpreting phenomena and developing experimental and computational tools. Engineering mechanics is the application of applied mechanics to solve problems involving common engineering elements. The goal of this engineering mechanics course is to expose students to problems in mechanics as applied to plausibly real-world scenarios. Problems of particular types are explored in detail in the hopes that students will gain an inductive understanding of the underlying principles at work. Students should then be able to recognize problems of this sort in real-world situations and respond accordingly. Our 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.

The importance of measuring instruments and transducers is well known in the various engineering fields. The book provides comprehensive coverage of various electrical and electronic measuring instruments, transducers, data acquisition system, storage and display devices. The book starts with explaining the theory of measurement including characteristics of instruments, classification standards, statistical analysis and limiting errors. Then the book explains the various electrical and electronic instruments such as PMMC, moving iron, electro-dynamometer type, energy meter, wattmeter, digital voltmeters and multimeters. It also includes the discussion of various magnetic measurements, instrument transformers, power factor meters, frequency meters, phase meters and synchros. The book further explains d.c. and a.c. potentiometers and their applications. The book teaches various d.c. and a.c. bridges along with necessary derivations and phasor diagrams. The book incorporates the various storage and display devices such as, recorders, plotters, printers, oscilloscopes, LED, LCDs and dot matrix displays. The chapter on transducers is dedicated to the detailed discussion of various types of transducers such as resistive, capacitive, strain gauges, RTD, thermistors, inductive, LVDT, thermocouples, piezoelectric, photoelectric and digital transducers. It also adds the discussion on optical fiber sensors. The book also includes good coverage of data acquisition

system, data loggers, DACs and ADCs. Each chapter starts with the background of the topic. Then it gives the conceptual knowledge about the topic dividing it into various sections and subsections. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

In machine design or design of machine elements we study about the design of individual components of machinery like shafts, keys, belts, bolts, gears, etc. In mechanical system design we mean that how these components are going to work in collaboration, reliability of the system when different components work together. This book includes design of conveyors for material handling systems (belt conveyors), design of multispeed gearbox for machine tools, design of I.C. engine components and optimum design. It also includes the design of pressure vessels used in mechanical systems. This book provides a systematic exposition of the basic concepts and techniques involved in design of mechanical systems. Our 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.

Currently, informatics within the field of public health is a developing and growing

industry. Clinical informatics are used in direct patient care by supplying medical practitioners with information that can be used to develop a care plan. Intelligent applications in clinical informatics facilitates with the technology-based solution to analyze data or medical images and help clinicians to retrieve that information. Decision models aid with making complex decisions especially in uncertain situations. The Handbook of Research on Applied Intelligence for Health and Clinical Informatics is a comprehensive reference book that focuses on the study of resources and methods for the management of healthcare infrastructure and information. This book provides insights on how applied intelligence with deep learning, experiential learning, and more will impact healthcare and clinical information processing. The content explores the representation, processing, and communication of clinical information in natural and engineered systems. This book covers a range of topics including applied intelligence, medical imaging, telehealth, and decision support systems, and also looks at technologies and tools used in the detection and diagnosis of medical conditions such as cancers, diabetes, heart disease, lung disease, and prenatal syndromes. It is an essential reference source for diagnosticians, medical professionals, imaging specialists, data specialists, IT consultants, medical technologists, academicians, researchers, industrial experts, scientists, and students.

Applications of Fundamentals  
Protection and Switchgear  
Modelling Diesel Combustion  
Basic Mechanical Engineering  
Kinematics of Machinery

*Developments in the areas of biology and bioinformatics are continuously evolving and creating a plethora of data that needs to be analyzed and decrypted. Since it can be difficult to decipher the multitudes of data within these areas, new computational techniques and tools are being employed to assist researchers in their findings. The Handbook of Research on Computational Intelligence Applications in Bioinformatics examines emergent research in handling real-world problems through the application of various computation technologies and techniques. Featuring theoretical concepts and best practices in the areas of computational intelligence, artificial intelligence, big data, and bio-inspired computing, this publication is a critical reference source for graduate students, professionals, academics, and researchers.*

*The book covers all the aspects of Basic Electrical and Instrumentation Engineering for undergraduate course. Various concepts of three phase a.c. circuit analysis with balanced and unbalanced loads, tariff and power factor improvement, single phase and three phase transformers, d.c. machines, single phase and three phase induction motors, alternators, synchronous motors, basics of measuring instruments and transducers are explained in the book with the help of comprehensive approach. The book starts with explaining the three phase a.c. circuit analysis with balanced and unbalanced loads, concept of transmission, distribution and power system protection. The discussion of tariff and power factor improvement is also added in support. The book further explains single phase and three phase transformers. Then book provides the detailed*

*discussion of d.c. generators and motors. The book also includes the discussion of three phase and single phase induction motors, synchronous generators, synchronous motors and other motors such as stepper motor, brushless d.c. motor and universal motor. The book covers the classification and basic requirements of a measuring instrument. Then the book explains the static and dynamic characteristics and types of errors in measuring instruments. The book provides in depth discussion of electronic multimeter and oscilloscope. The book teaches the details of various types of transducers like resistive, inductive, capacitive, thermoelectric, piezoelectric, photoelectric and Hall effect transducers. The book uses plain, simple and lucid language to explain each topic. Each chapter gives the conceptual knowledge about the topic dividing it in the various sections and subsections. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.*

*Cloud technologies have revolutionized the way we store information and perform various computing tasks. With the rise of this new technology, the ability to secure information stored on the cloud becomes a concern. The Handbook of Research on Securing Cloud-Based Databases with Biometric Applications explores the latest innovations in promoting cloud security through human authentication techniques. Exploring methods of access by identification, including the analysis of facial features, fingerprints, DNA, dental characteristics, and voice patterns, this publication is designed especially for IT professionals, academicians, and upper-level students seeking current research surrounding cloud security.*

*This book contains 74 papers presented at ICTCS 2017: Third International Conference on Information and Communication Technology for Competitive Strategies. The conference was held during 16–17 December 2017, Udaipur, India and organized by Association of Computing Machinery, Udaipur Professional Chapter in association with The Institution of Engineers (India), Udaipur Local Center and Global*

*Knowledge Research Foundation. This book contains papers mainly focused on ICT for Computation, Algorithms and Data Analytics and IT Security etc.*

*Fifth Report*

*Review of the Research Program of the U.S. DRIVE Partnership*

*Advances and Applications*

*Basic Electronics*

*Basic Electrical & Instrumentation Engineering*

***This book offers a primer on the valuation of digital intangibles, a trending class of immaterial assets. Startups like successful unicorns, as well as consolidated firms desperately working to re-engineer their business models, are now trying to go digital and to reap higher returns by exploiting new intangibles. This book is innovative in its design and concept since it tackles a frontier topic with an original methodology, combining academic rigor with practical insights. Digital intangibles range from digitized versions of traditional immaterial assets (brands, patents, know-how, etc.) to more trendy applications like big data, Internet of Things, interoperable databases, artificial intelligence, digital newspapers, social networks, blockchains, FinTech applications, etc. This book comprehensively addresses related valuation issues, and demonstrates how best practices can be applied to specific asset appraisals, making it of interest to researchers, students, and practitioners alike.***

***This book is focused on the impact of the COVID-19 pandemic on different sectors, i.e., education, real estate, health, and agriculture. The lockdown has been***

***announced to control the spread of COVID-19 infections, however people/industries/organizations were not ready for lockdown and it has greatly affected their growth. The front workers in the healthcare sector suffered a lot as major responsibilities they needed to carry on. The education sector is also hampered due to the pandemic as schools, colleges were closed and teaching, examinations were carried out on online platforms. These platforms were new to teachers as well as students. The real estate sector faced tremendous loss in this pandemic as people were scared and no one ready to invest their money in such an uncertain time. The agriculture filed is also suffered as raw materials required for agriculture were not available readily due to pandemic. This book presents a survey that is conducted to understand the impact of COVID-19 on the quality of work-life in various sectors. The survey is focused majorly on four sectors, i.e. education, healthcare, real estate and agriculture. Data analysis is done based on responses of survey and mathematical modeling is provided for each case study. This comprehensive and student friendly text gives a clear analysis of the fundamental aspects of the subject, starting from surface behaviour and contact phenomenon of interfacing surface. The book elaborates the types, specification and standardization and measurement of surface irregularities in evaluating triboproperties in relation to friction, lubrication and wear. Besides, it also discusses various lubricants and their selection. The text reflects the rich and varied experience of the authors in teaching, research and industry and provides real life cases encountered by them. This practice-oriented book, which contains a***

***large number of worked-out examples, exercises and other pedagogic features, is intended as a text for undergraduate and postgraduate students of production, mechanical and design engineering. It can also be profitably used as a reference by practising engineers.***

***• Some benefits of studying from Oswaal JEE (Main)' Solved Papers (Question Bank) 2022 are: • Chapter-wise and Topic-wise • Trend Analysis:Chapter-wise • Latest JEE (Main) Question Papers (Four shifts) 2021- Fully solved • Previous Years' (2019-2021)Exam Questions to facilitate focused study • Mind Maps:A single page snapshot of the entire chapter for longer retention • Mnemonicsto boost memory and confidence • Oswaal QR Codes:Easy to scan QR codes for online concept based content • Two SQPsbased on the latest pattern • Tips to crack JEE (Main)***

***Technology, Marketing and Internet***

***Proceedings of ICT4SD 2016, Volume 2***

***The Valuation of Digital Intangibles***

***Oswaal Physics JEE (Mains) Solved Papers + JEE Main Mock Test 15 Sample Question Papers (Set of 2 Books) (For 2022 Exam)***

***Oswaal JEE Main Mock Test 15 Sample Question Papers, (Physics, Chemistry, Mathematics) (For 2022 Exam)***

***Some benefits of studying from Oswaal JEE (Main)' Solved Papers (Question Bank) 2022 are: Chapter-wise and Topic-wise Trend***

Analysis: Chapter-wise Latest JEE (Main) Question Papers (Four shifts) 2021- Fully solved Previous Years' (2019-2021) Exam Questions to facilitate focused study Mind Maps: A single page snapshot of the entire chapter for longer retention Mnemonics to boost memory and confidence Oswaal QR Codes: Easy to scan QR codes for online concept based content Two SQPs based on the latest pattern Tips to crack JEE (Main)

The book is primarily designed to cater to the needs of undergraduate and postgraduate students of Electronics and Communication Engineering and allied branches. It also caters for fundamental requirements of professionals working on design and development of antenna and wave propagation related equipment either in research laboratories or industries or academic institutions elsewhere. The book has been written with intent to grasp the basic understanding of theoretical as well as practical aspects of electromagnetic wave propagation and antenna engineering. The text has been aptly scripted considering the requirements of average students who can easily grasp and comprehend the basics of wave propagation and radiation mechanism of varieties of antennas coupled with their

critical functionalities, utilities, advantages/disadvantages without any external assistance of teachers or other reference books. The book broaches very well on practical methods of parametric measurements of antenna with right measuring test equipment and associated tools. The last chapter of the book is dedicated to advance technology adopted in design and development of modern antenna. Key features • A fairly large number of well labelled diagrams to provide practical understanding of the concepts. • The placement of numericals at appropriate places develops confidence among readers and enthruses them further to read in depth to crack any regular or competitive examinations. • Chapter summary highlights important points for quick recap and revision before examination. • Well-crafted multiple choice questions with answers at the end of each chapter to stimulate thought process and prepare better for viva-voce and competitive examinations. • Appropriate number of unsolved numerical problems with answers to improve problem solving skill of students.

Built Environment means human-made environment for Livelihood, Living, and Life, i.e. Livability of human beings with contentment. History throws light on the development of houses, buildings, villages,

cities and mega cities along with many other amenities as per necessity and available technology. Future challenges related to the creation of built environment for human beings are now expected for the population of 8.6 billion in the year 2030, 9.2 billion in the year 2050 and 11.2 billion in the year 2100. These challenges include limited resources of land, water, air, food, jobs and shelters. Hence, we need Sustainable, Green, Smart villages and cities created by Urban Planners, Architects, Engineers and many other related consultants with the support of governing authorities. This revised edition of the book on Building Drawing, 6th Edition deals with the subject with an approach to build Sustainable, Green, and Smart Cities for Welfare of all. Highlights: # A new chapter on City Planning for the Future to motivate new architects and civil engineers to choose career in Urban Planning and Designing. # Upgraded chapters 1 and 2 to discuss sustainable development and designing of Smart Cities in detail. # A thorough discussion on the methods of preparing various types of drawings as per the Indian Standard specifications . # Latest case studies and quotations from well-known thinkers, architects and professionals to inspire learners to know more about

the multidisciplinary subject, Built Environment . # Reading Exercises and Project Works to enhance practical skills of learners through subject and self-learning techniques

Engineering Mechanics

Oswaal Chemistry Topper's Handbook + JEE Main Mock Test 15 Sample Question Papers (Set of 2 Books) (For 2022 Exam)

Electrical Measurements and Instrumentation

Handbook of Research on Securing Cloud-Based Databases with Biometric Applications

Metrology & Measurement