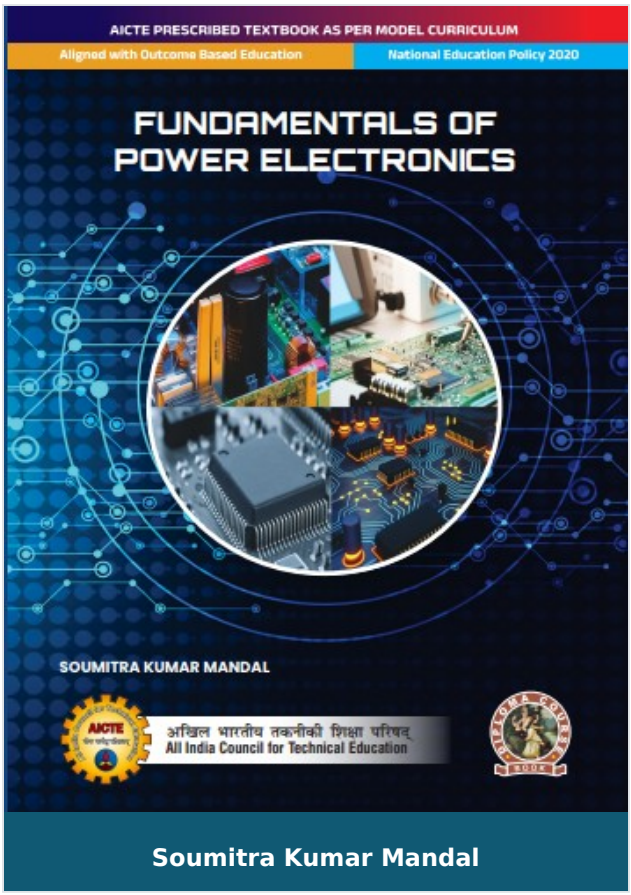


Fundamentals of Power Electronics

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Product Description

Fundamentals of Power Electronics

The Fundamentals of Power Electronics are well established and nowadays all power electronics devices are used in control of ac and Household applications. It is essential for ECE, Industrial Electronics, EEE and Electrical diploma holders. This book is basic for new learners. This book introduces the concept of power electronics, construction, working principle, V-1 characteristics of power semiconductor devices such as power BJT, Power MOSFET, IGBT, Thyristor, SCR, LASCR, SCS, GTO, UJT, PUT, DIAC and TRIAC, SET and Nano-technology, turn-on and turn-off methods of thyristors, different triggering circuits, commutation

Salient features:

- Content of the book aligned with the mapping course outcomes, programs and Units Outcomes.
- In the beginning of each unit learning outcomes are listed to make the student understand what is expected out of him/her after completing that unit.
- Book provides lots of recent information, interesting facts, QR code for E-resources, QR code for use of ICT, projects, group discussion etc.
- Student and teacher centric subject materials included in book with balanced and chronological manner.
- Figures, tables, and software screen shots are inserted to improve clarity of the topics.
- Apart from essential information a ‘know more’ section is also provided in each unit to extend the learning beyond syllabus.
- Short questions, objective questions and long answer exercises are given for practice of students after every chapter.

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- Solved and unsolved problems including numerical examples are solved with systematic steps.

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- Turn-On and Turn-Off Methods of Thyristors
- Phase Controlled Rectifies
- Industrial Control Circuits
- CO and PO Attainment Table

Author

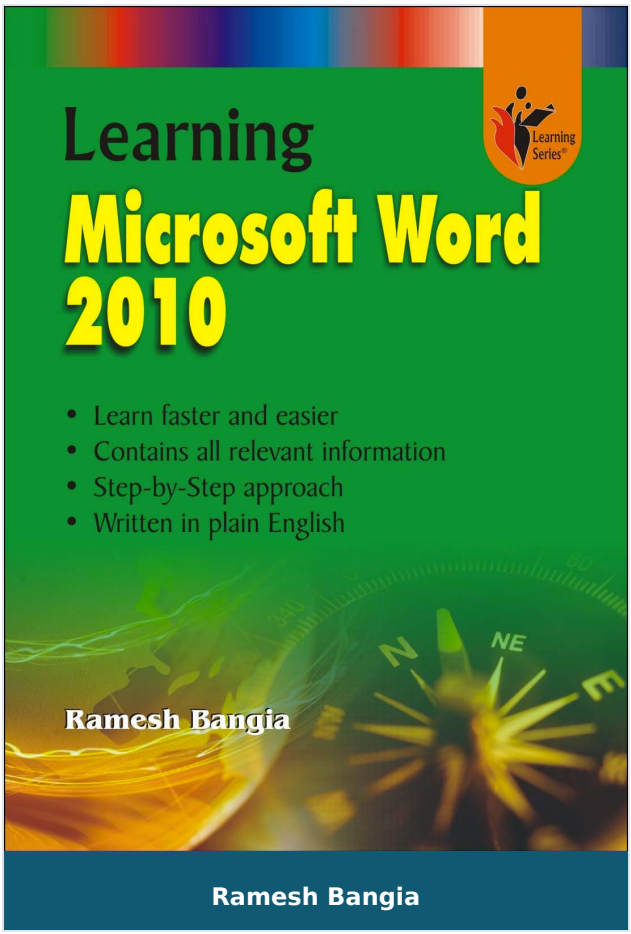
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Learning Microsoft Word 2010

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Product Description

The complete Learning Series has been designed in a very systematic and logical manner. Each topic has been developed from the basic concepts. Practically every major point in the text is illustrated with suitable examples and screen shots. This will help the students in understanding the basic theory and train them in solving every problem systematically, and confidently. A large number of unsolved as well as solved exercises have also been included in the book. Microsoft word 2010 is a word processing program used for creating letter, e-mail, office memos, brochures, fax messages, etc. This book explains the working of the software in details especially in the case of mail Merge, Table of contents, header and footer, page breaks, etc. each command of the various panels are explained in details. The language of the text of the book is lucid, direct and easy-to understand. Each chapter is laced with various diagrams wherever possible. Mail merge has been explained with a live example. Tips for working faster using the keyboard shortcuts are also provided.

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- Creating Tables in Microsoft Word 2010
- Working with Graphics and Charts in Microsoft Word 2010
- Additional Commands of Microsoft Word 2010
- Keyboard Shortcuts of Microsoft Word 2010
- Questions

Author

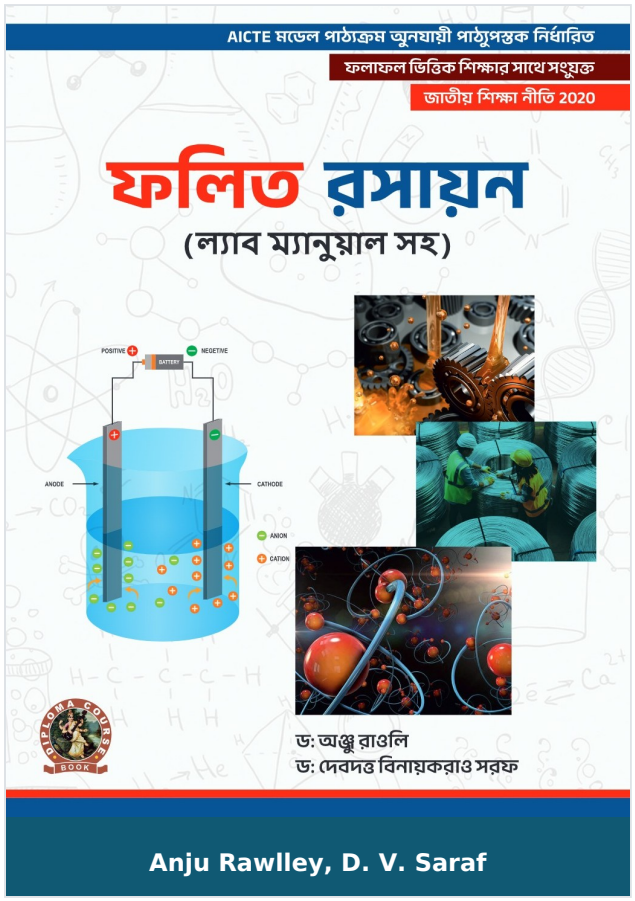
Ramesh Bangia

Ramesh Bangia, has been writing computer books on various topics. He has written books for Schools. Training Institutes, Technical Universities, Distance Education Programs, Colleges and General. His tally of books exceeds 500 in number. Trained both in India and Abroad and having studied at IIT Delhi, he becomes automatic choice for most of the publishers in India. Though based in Delhi, his books are popular all over India and are even exported to Middle Ease and African countries.

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Applied Chemistry (with Lab Manual)

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Product Description

This text book o “Applied Chemistry” is development as per AICTE model curriculum ,2018, for compulsory course on Applied Chemistry of first years Diploma Program in Engineering and Technology. Atomic Structure, Chemical Bonding & Solution, Water, Engineering Materials, Chemistry of fuels & Lubricants and Electrochemistry are the five units of this book, comprising of both practical and theory.

Some salient features of the book:

1. Course Outcomes and Unit Outcomes are written specifically and are mapped with program Outcomes.

2. Utmost care have been taken to amalgamate the philosophy of outcome based education.

3. The structure of the textbook is comprehensive, where in practical exercises are integral part of each unit.

4. The text is presented in a very simple way with illustrations, examples, tables, flow chart, self -assessment questions and their solutions.

5. Micro projects, points/issue for the creative inquisitiveness & curiosity, know more, video links, case study and summary points are integral part of each unit to facilitate the students to develop the attitude of scientific inquiry, investigate the cause and effect relationship, systematic, scientific & logical thinking , ability to observe, analyse and interpret.

6. To meet the requirement of outcome based education (OBE) and outcome based assessment (OBA), criterion referenced testing (CRT) have been used as an integral part of assessment in each practical.

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7. Sample QR codes have been provided in each units on some topics/sub topics for supplementary reading and reinforcing the learning.

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- Guidelines for students
- Atomic Structure, Chemical Bonding and Solutions.
- Water.
- Engineering Materials.
- Chemistry of Fuels and Lubricants.
- Electro Chemistry.

Author

Anju Rawlley

Anju Rawlley Devdatta Vinayakarao Saraf

D. V. Saraf

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Product Description

“Environmental Science” is an audit course for the first year Diploma program in Engineering & Technology. Syllabus of this book is strictly aligned as per model curriculum of AICTE, and academic content is amalgamated with the concept of outcome-based education.

Book covers four units- Ecosystem, Air and Noise Pollution, Renewable Sources of Energy and Solid waste management, ISO 14000 & Environmental Management, Every unit contains as set of exercise at the end of each unit to test the student’s comprehension.

Some salient features of the book:

1.Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes.

2. Book provides lots of recent information, interesting facts, QR Code for E-resources, QR Code for use of ICT, projects, group discussion etc.

3. Student and teacher centric subject materials included in book with balanced and chronological manner.

4. Figures and tables are insert to improve clarity of the topics.

5. Objective questions, Short questions and long answer exercise given for practice of students after every unit.

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- Air and Noise pollution
- Renewable sources of Energy
- Soil waste Management, ISO 14000& Environmental management.
- Important Day Related to Environment
- CO and Po Attainment Table
- Index.

Author

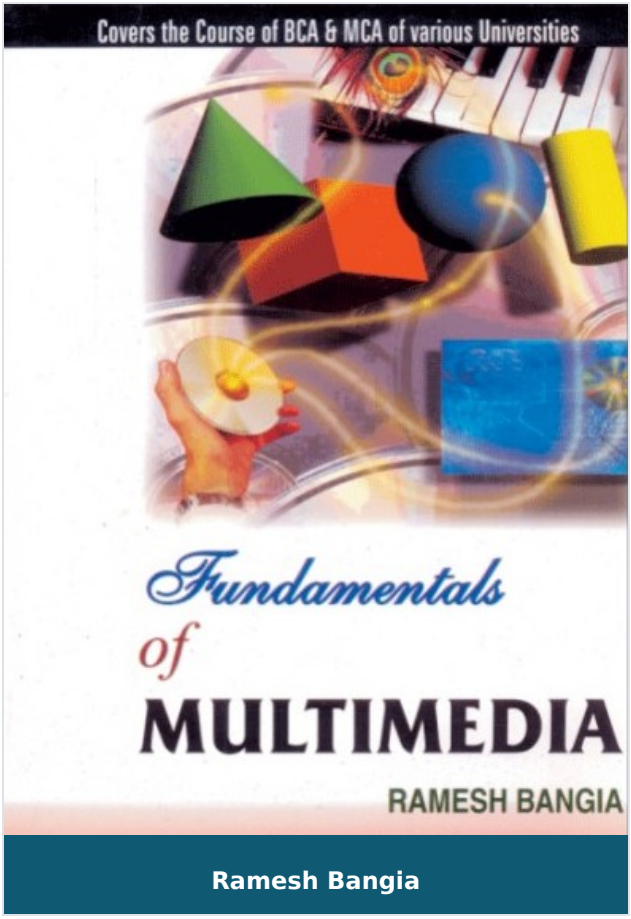
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Fundamentals of Multimedia

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Product Description

The book has been designed to take care of the syllabus of various Universities conducting the courses of BCA and MCA having multimedia as one of the subject. Complete syllabus of Guru Nanak dev University and Rajiv Gandhi Praudyogiki Vishya Vidyalya of M.P. has been wonder this subject is taught in all the technical institutes of India. each chapter is laced with screen shots and equations where ever needed. A revision of the chapter appears at the end followed by different type of questions which the students of the subject would find quite useful.

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- Making Sound
- Understanding Videos
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Author

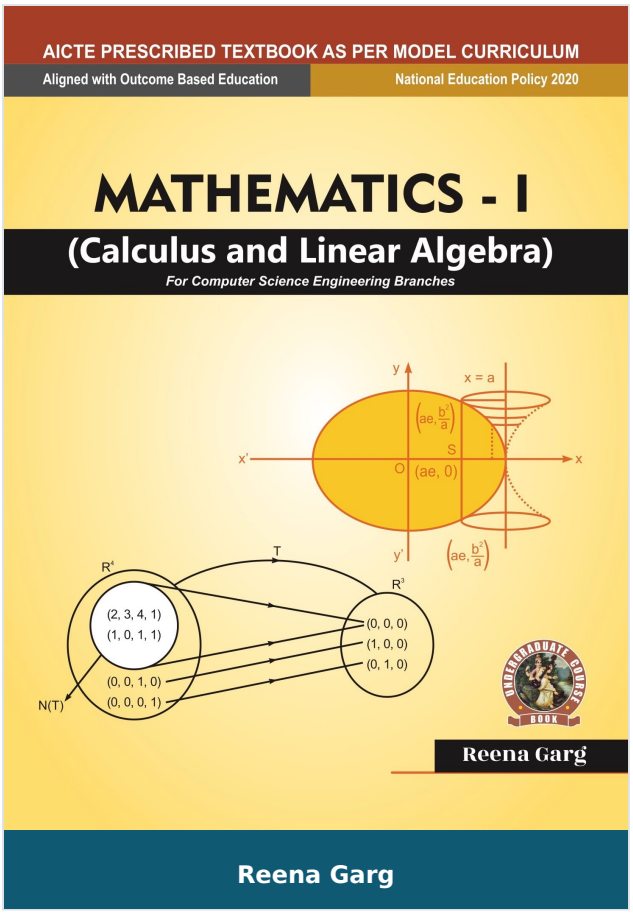
Ramesh Bangia

Ramesh Bangia, has been writing computer books on various topics. He has written books for Schools. Training Institutes, Technical Universities, Distance Education Programs, Colleges and General. His tally of books exceeds 500 in number. Trained both in India and Abroad and having studied at IIT Delhi, he becomes automatic choice for most of the publishers in India. Though based in Delhi, his books are popular all over India and are even exported to Middle Ease and African countries.

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Mathematics-I (Calculus and Linear Algebra) For Computer Science Engineering Branches

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Product Description

Calculus and Linear Algebra cover all the modules prescribed by AICTE model curriculum to all the 1st year CSE students studying in engineering institutions and universities of the country. It serves as both text book /or useful reference work. It contains 5 units which included calculus, Algebra and vector spaces along with their applications. This renowned and well respected title provides in one handy volume with the essential mathematical tools that help in understanding the subject and problem solving techniques with many real life engineering applications. As per trademark of AICTE. This book is in student's friendly style, author has endeavored enormous efforts in providing numerous solved examples and exercise under each topic to facilitate better understanding of the concepts to the students. Majority of questions in this book have been designed to access the reader's understanding of the subject professionals or those who are preparing for competitive examinations will also find this book very useful. This book will give the students a complete grasp of the mathematical skills that are needed by engineers all over the country.

Some Salient Features of the Book:

1. In depth coverage of all related, essential and mentioned topics as per AICTE in simple presentation with clarity and accuracy.

2. Emphasis on the applications of concepts and theorems.

3. Core concepts are presented through a large number of solved graded model examples in an innovative and lucid manner.

4. A good number of relatively competitive problems are given at the end of each unit in the form of short questions, HOTS, assignments, MCQs and know more for student's practices purpose. Practical /Projects/ Activity also given in each unit for enhancing the student's capability, to increase the feeling of team work.

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5. To clarify the subject, the text has been supplemented through Notes, Observations and Remarks; an attempt has been made to explain the topic through maximum use of geometries wherever possible.

6. Some standard problems with sufficient hints have been included in each exercise to gauge the student’s visual understanding and for grasp the theory.

7. Video links, interesting facts, uses of ICT also included after each topic in every unit for easy understanding of the readers. Also included the pictorial representations of many topics for fast and permanent grasping of the content.

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- Vector
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- CO and Po Attainment Table.

Author

Reena Garg

Dr. Reena Garg , M.Sc. Mathematics (Gold Medalist), M.Phil, Ph.D is Assistant Professor (Mathematics) in YMCA University of Science & Technology, Faridabad (Haryana). She also taught in C.I.T.M. Faridabad (presently known as Manav Rachna International University, Faridabad). Her teaching experience of more than a decade has made this

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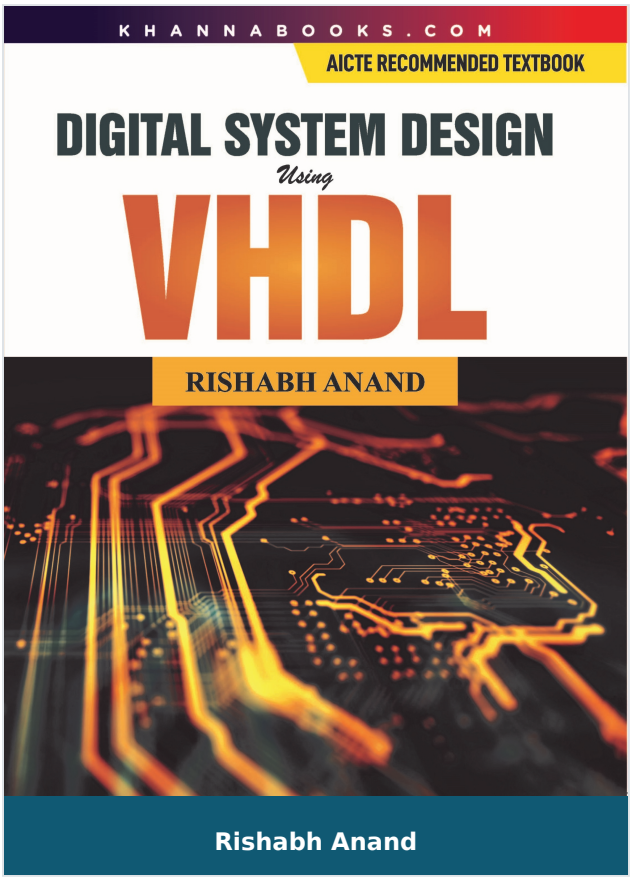
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book more valuable for the knowledge seekers.She has published more than 10 research papers in various InternationalJournals. She is a life-time member of Forum of Inter-disciplinary mathematics in India. She is a member of reviewer Board in IJRET, Bangalore.

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Digital System Design Using VHDL

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Product Description

The book covers the complete syllabus of subject as suggested by most of the universities in India. Generic VHDL code is taught and used through out the book so that different companies. VHDL tools can be used if desired. Moving from the unknown in a logical manner. Subject matter in each chapter develops systematically from inceptions. Large number of carefully selected worked examples in sufficient details. No other reference is required. Ideally suited for self-study.

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- Specification And Implementation Of A Microcomputer
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- Frequently Asked Questions
- Appendix

Author

Rishabh Anand

Rishabh Anand received his Bachelor‘s degree B.E (Hons) in Electronics and Communication Engineering from Maharishi Dayanand University, Rohtak in 2006. The author is M.Tech. in Electronics and Communication Engineering from Veer Bahadur Singh Purvanchal University, Jaunpur in 2014, and MBA from Indian Institute of Management, Kozhikode in 2016. The Author is Program Diploma in Innovation Management from International Business Management Institute, Germany (Berlin) in 2020. The author has contributed to research publications in refereed, cited International Conferences and Journals, and attended many conferences, workshops, FDPs, and seminars. Also, he is the reviewer member of IJSDR Journal. He is a prolific author with 34 Text and Reference books to his credit, for B. Tech. (ECE/CSE/IT), M.Tech. (ECE/CSE/IT), BCA, MCA, and other courses of different Universities of India and overseas. His areas of interest include Software Project Management, Cloud Computing, Deep Learning, Tensor Flow, Python, R

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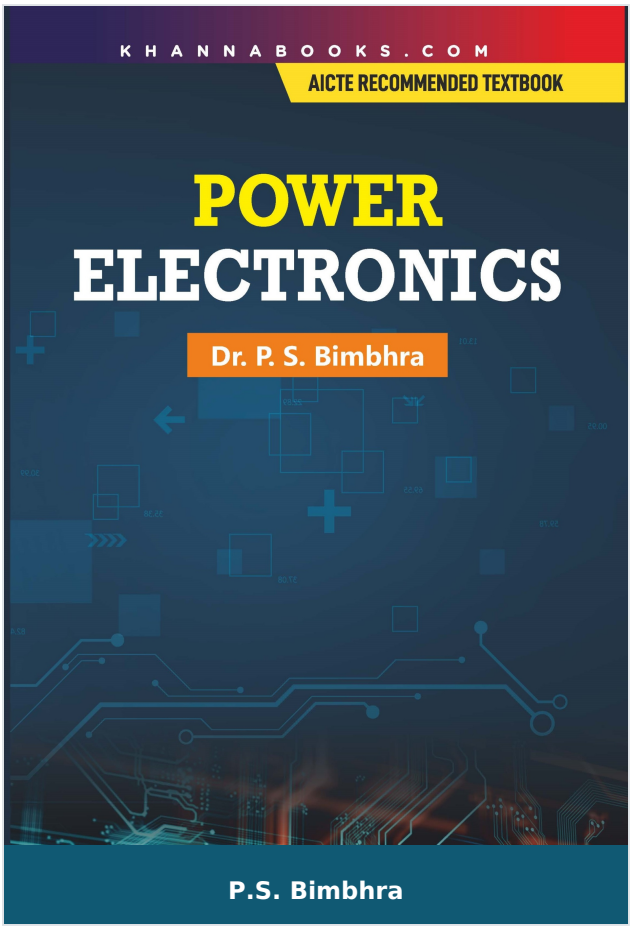
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Programming and Machine Learning. He is currently working in ITES industry as a Global Service Delivery Manager. He is Project Management Professional (PMP)®, ITIL® Foundation Certificate in IT Service Management, PRINCE2® Practitioner Certification - Project Management, ScrumMaster® (CSM®), Certified Six Sigma White Belt (CSSWB™), Lean Six Sigma White Belt Certified (LSSWBC™) and Certified Six Sigma Green Belt™ (CSSGB™). The author delivers lectures as Visiting Faculty (Assistant Professor) in the Global Institute of Technology and Management, Farrukh Nagar, Gurgaon.

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Power Electronics

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Product Description

This book is designed to sever a textbook for the students of engineering studying a course on power Electronics. It provides a lucid and comprehensive treatment of the topics covered in the book.

A large number of illustrative figures and a wide variety of worked examples add to the clarity of subject mater. This book would be found suitable as a textbook for the students pursuing courses in the areas of the Electrical, Electronics, Instrumentation, Telecommunications and Mechatronics.

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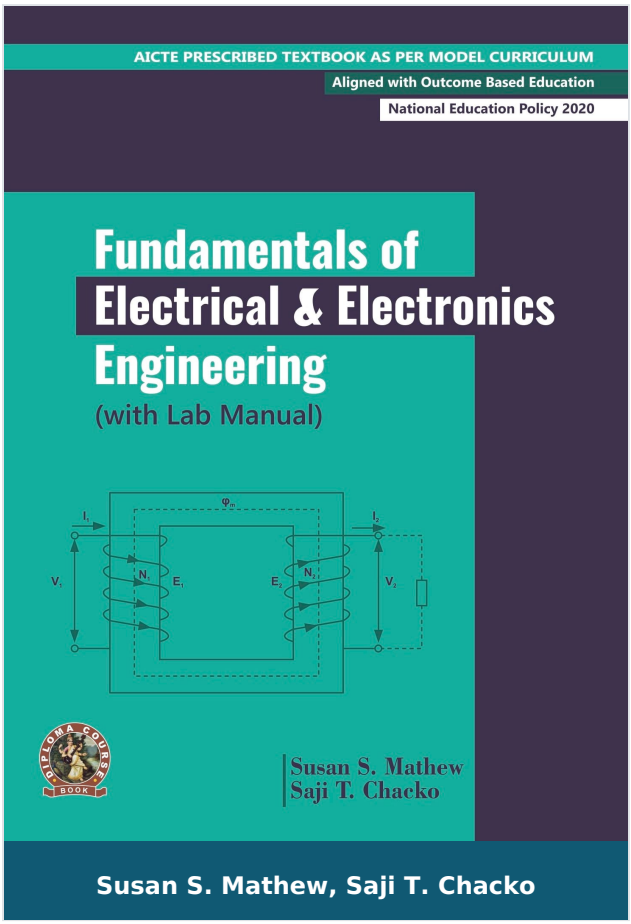
P.S. Bimbhra

Dr. P.S. Bimbhra retired as a professor of Electrical and Electronics Engineering from T.I.E.T. Patiala. A graduate of Punjab Engineering College, Chandigarh, he received his M.E. (Hons.) and Ph.D. from IIT Roorkee. He is fellow of the Institution of Engineers and a life member of ISTE. His areas of current interests include Electrical Machines, Power Electronics and Electric Drives.

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Fundamentals of Electrical and Electronics Engineering (with Lab Manual)

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Product Description

“Fundamentals of Electrical & Electronics Engineering” is a compulsory paper for the first year Diploma course in Engineering & Technology Syllabus of this book is strictly aligned as per model curriculum of AICTE, and academic content is amalgamated with the concept of outcome based education.

Books covers six topics- Overview of Electronics Components and Signals. Overview of Analog Circuits. Overview of Digital Electronics, Electric and magnetic Circuits, A.C. Circuits and Transformer and Machines. Each topic is written is easy and lucid manner. A set of exercises at the end of each units to test the student’s comprehension is provided.

Some salient features of the book:

1. Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes.

2. The practical applications of the topics are discussed along with micro projects and activities for generating further curiosity as well as improving problem solving capacity.

3. Book provides lots of vital facts, concepts, principles and other interesting information.

4. QR Codes of video resources and websites to enhance use of ICT for relevant supportive knowledge have been provided.

5. Student and teacher centric course materials included in book in balanced manner.

l6. Figures, tables, equations and comparative charts are inserted to improve clarity of the topics.

7. Objective questions and subjective questions are given for practices of students at the end of each unit.

Solved and unsolved problems including numerical examples are solved with systematic steps

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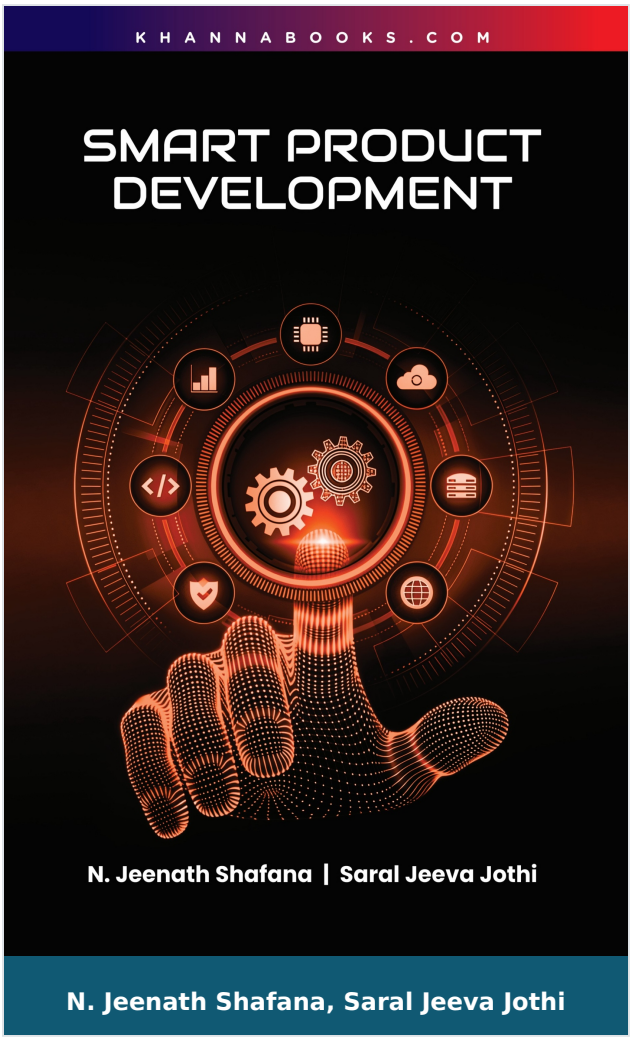
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Smart Product Development

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Product Description

This book is an indispensable resource for navigating the rapidly evolving landscape of smart technologies, where the integration of sensors and smart systems is pivotal for advancing functionality across a wide range of industries. Titled SMART PRODUCT DEVELOPMENT, this comprehensive guide is designed to equip its target audience—students, engineers, professionals, and technology enthusiasts—with the foundational knowledge and practical skills needed to master the complexities of modern connected devices.

The core purpose is to provide a deep, structured understanding of sensor devices—the eyes, ears, and nervous system of modern technology—their diverse applications, and their essential interfacing with Microcontroller Units (MCUs). The text begins by introducing fundamental sensor types, including piezoresistive, capacitive, and resonant sensors, detailing their design and real-world use in applications from wearable tech to autonomous vehicles.

Moving beyond hardware, the book thoroughly explores signal conditioning, digital conversion, and advanced control techniques such as state machines, fuzzy logic, and neural networks, showing how to integrate sensors into larger, reliable systems. Critical sections are dedicated to communication protocols (including wireless networks, RF sensing, and automotive standards) and the vital role of IEEE 1451 standards in ensuring system interoperability. Finally, the book connects theory to practice by examining real-world use cases in creating Smart Cities, covering applications in agriculture, health, disaster prevention, and water management, alongside the challenges of implementing AI and IoT at scale. This blend of theory, practical knowledge, and case studies makes it a crucial resource for aspiring engineers and industry experts.

Salient Features:

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• Sensor Fundamentals: Provides comprehensive foundational insights into diverse sensor technologies, covering principles, classifications (active/passive), and detailed working mechanisms for types like piezoresistive and capacitive sensors.

• Microcontroller Interfacing: Focuses on how sensor data is processed, amplified, and conditioned for use, emphasizing Digital Conversion and the essential design considerations for effective MCU control in embedded systems.

• Advanced Control Logic: Explores modern automation and system behavior control using state machines, Fuzzy Logic systems for nuanced decision-making, and sensor control via Neural Networks.

• Communication Protocols: Deep dive into crucial standards for smart sensor connectivity, including wireless networks (Wi-Fi, Zigbee, Bluetooth), RF sensing, Telemetry, and specialized Automotive Protocols.

• Industry Standards: Details the architecture and benefits of the IEEE 1451 standards for smart sensors, ensuring necessary compatibility and interoperability between devices, control systems, and embedded technologies.

• IoT Case Studies: Presents transformative, real-world applications within the Smart Cities paradigm, covering sectors like smart agriculture, health, disaster prevention, and advanced water/waste management.

• AI/ML Integration: Discusses the challenges and solutions for developing AI and IoT systems at scale, covering predictive analytics, data quality, and the ethical considerations necessary for smart product success.

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