



Basic Electronics Engineering

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About the Book

Basic Electronics Engineering is written to cater to the needs of the undergraduate courses in the discipline of Electronics & Communication Engineering, Computer Science Engineering, Information Technology, Electronics & Instrumentation Engineering, Electrical & Electronics Engineering and postgraduate students specializing in Electronics. It will also serve as reference material for engineers employed in industry. The fundamental concepts and principles behind digital logic designs are explained in a simple, easy-to-understand manner. Each chapter contains a large number of solved examples and problems. This textbook is organized into thirteen chapters, covering the syllabus requirements. The last chapter gives the possible experiments of digital logic design that can be done by students of B.E. / B. Tech level.

Salient Features

Detailed coverage of electronics system, instrumentation, communication, sequential logic circuits, combinational logic circuits, operational amplifier and applications of BJT and diode
 Comprehensive chapter on digital logic families, electronics measurement, feedback and oscillators
 A large number of solved examples and objective type questions, along with clear elucidation and solution of various problems, and a large number of neat, well-labelled diagrams

Table of Contents

1. Introduction to Electronics, Current and Voltage Sources and Semiconductor Physics
2. Semiconductor Diode and its Applications
3. Bipolar Junction Transistor (BJT), Transistor Biasing and Stabilization of Operating Point
4. Applications of BJTs
5. Field Effect Transistor (FET) & Special Diodes and Its Applications
6. Electronics Oscillators & Basics of SCR & UJT
7. Number Systems and Boolean Algebra
8. Combinational Circuits
9. Sequential Circuits
10. Digital Logic Families
11. Electronics Instruments & Measurements
12. Basics & Applications of Communication System
13. Basics & Applications of Operational Amplifier

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Syed Akhtar Imam :- received the Bachelor's degree in Electrical Engineering from Jamia Millia Islamia, M. Tech degree (Instrumentation and Control System) from Aligarh Muslim University, Aligarh and Ph.D. degree in Electronics & Communication Engineering from Jamia Millia Islamia (A Central University), New Delhi, in 1990, 1998, and 2008, respectively. Since 1990, he has been part of Jamia Millia Islamia, New Delhi. Presently, he is working as Associate Professor in the Department of Electronics and Communication Engineering. He worked as Supervisor at Electrical Maintenance Division, PWD, Lucknow, (U.P.) before joining Jamia Millia Islamia. His research interests include Sensing Technologies, Electrical, Electronic and Bioinstrumentation, Wireless Sensor Networks and Digital Circuits. He has published more than 60 research papers in journals of repute and 40 research papers in national/international conferences. In addition, he has participated and presented 25 research papers in national/international refereed conferences in India and abroad.

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