

Basic Electrical Electronics Engineering Salivahanan

This book is meant for the undergraduate students of Electronics, Electrical, Instrumentation and Computer Science Engineering for the courses on Basic Electronics/Electronic Devices and Circuits. It gives detailed description of the operation and characteristics of modern active and passive electronic devices. Logical organization of the chapters, simple language, wide variety of problems with their step by step solutions for every concept makes this book a perfect offering on the subject.

We are excited to present the third edition of Linear Integrated Circuits by renowned authors. The revised edition continues with its essence of dealing with ICs in detail including theoretical, analytical and application aspects. The learning outcomes-based style of content delivery provides the undergraduate engineering students a thorough understanding of the concepts and induces further exploration into the topics. The book will be a useful reference to GATE, UPSC and other competitive examinations aspirants.

For almost 30 years, this book has been a classic text for electronics enthusiasts. Now completely updated for today's technology with easy explanations and presented in a more user-friendly format, this third edition helps you learn the essentials you need to work with electronic circuits. All you need is a general understanding of electronics concepts such as Ohm's law and current flow, and an acquaintance with first-year algebra. The question-and-answer format, illustrative experiments, and self-tests at the end of each chapter make it easy for you to learn at your own speed.

Aims of the Book: The foremost and primary aim of the book is to meet the requirements of

students pursuing following courses of study: 1. Diploma in Electronics and Communication Engineering (ECE)-3-year course offered by various Indian and foreign polytechnics and technical institutes like City and Guilds of London Institute (CGLI). 2. B.E. (Elect. & Comm.)-4-year course offered by various Engineering Colleges. Efforts have been made to cover the papers: Electronics-I & II and Pulse and Digital Circuits. 3. B.Sc. (Elect.)-3-Year vocationalised course recently introduced by Approach.

This book Basic Electrical and Electronics Engineering has a perfect blend of focused content and complete coverage. Simple, easy-to-understand and difficult-jargon-free text enhances the utility of the book and makes it a lasting resource for students and instructors. ?

Comprehensive coverage with lucid presentation style ? Rich exam-oriented pedagogy ?

Solved numerical examples within chapters ? Unsolved review questions ? Multiple-choice questions

An earnest attempt has been made in the book 'Basic Concepts of Electrical Engineering' to elucidate the principles and applications of Electrical Engineering and also its importance, so as to evince interest on the topics so that the student gets motivated to study the subject with interest.

Basic Electronics and Devices is designed specifically to cater to the needs of students of B. Tech. in Electrical and Electronics Engineering. The book has a perfect blend of focused content and complete coverage. Lucid text with several solved examples, circuit diagrams and adequate questions elucidate the fundamentals of electronics. Salient Features: -

Comprehensive syllabus coverage - An easy-to-understand text using tutorial approach - Rich pool of pedagogy – solved examples, exercise questions, objective type questions

A multicolor edition of Vol.II of A Textbook of Electrical Technology to keep pace with the ever-increasing scope of essential and modern technical information, the syllabi are frequently revised. This often results into compressing established facts to accommodate recent information in the syllabi. Fields of power-electronics and industrial power-conditioners have grown considerably resulting into changed priority of topics related to electrical machines. Switched reluctance-motors tend to threaten the most popular squirrel-cage induction motors due to their increased ruggedness, better performance including controllability and equal ease with which they suit rotary as well as linear-motion-applications.

The present book has been thoroughly revised and lot of useful material has been added. Several photographs of electronic devices and their specifications sheets have been included. This will help the students to have a better understanding of the electronic devices and circuits from application point of view. The mistakes and misprints, which have crept in, have been eliminated in this edition.

This third edition of Basic Electrical Engineering provides a lucid exposition of the principles of electrical engineering. The book provides an exhaustive coverage of topics such as network theory and analysis, magnetic circuits and energy conversion, ac and dc machines, basic analogue instruments, and power systems. The book also gives an introduction to illumination concepts.

Electromagnetism is the most pervasive force that exists in nature. Electromagnetic

field theory is the study of characteristics of electric, magnetic and combined fields. The book is designed specifically to cater the needs of fourth semester students of B.Tech. in Electronics and Communications Engineering, JNTU. Simple, easy-to-understand and difficult-jargon-free text elucidates the fundamentals of the subject area and makes it a lasting resource for the students. Salient Features: ? Comprehensive coverage with lucid presentation style ? Rich exam-oriented pedagogy ? Unsolved review questions ? Objective-type questions

PSpice for Circuit Theory and Electronic Devices is one of a series of five PSpice books and introduces the latest Cadence Orcad PSpice version 10.5 by simulating a range of DC and AC exercises. It is aimed primarily at those wishing to get up to speed with this version but will be of use to high school students, undergraduate students, and of course, lecturers. Circuit theorems are applied to a range of circuits and the calculations by hand after analysis are then compared to the simulated results. The Laplace transform and the s-plane are used to analyze CR and LR circuits where transient signals are involved. Here, the Probe output graphs demonstrate what a great learning tool PSpice is by providing the reader with a visual verification of any theoretical calculations. Series and parallel-tuned resonant circuits are investigated where the difficult concepts of dynamic impedance and selectivity are best understood by sweeping different circuit parameters through a range of values. Obtaining semiconductor device characteristics as a laboratory exercise has fallen out of favour of

late, but nevertheless, is still a useful exercise for understanding or modelling semiconductor devices. Inverting and non-inverting operational amplifiers characteristics such as gain-bandwidth are investigated and we will see the dependency of bandwidth on the gain using the performance analysis facility. Power amplifiers are examined where PSpice/Probe demonstrates very nicely the problems of cross-over distortion and other problems associated with power transistors. We examine power supplies and the problems of regulation, ground bounce, and power factor correction. Lastly, we look at MOSFET device characteristics and show how these devices are used to form basic CMOS logic gates such as NAND and NOR gates.

Electronic Devices is designed specifically to cater to the needs of second semester ECE students of Anna University. The book has a perfect blend of focused content and complete coverage. Solved Anna University question papers, which are tagged with specific topics, will be extremely helpful to students from the examination point of view. Simple, easy-to-understand and difficult-jargon-free text elucidates the fundamentals of electronics. Several solved examples, circuit diagrams and adequate questions further helps students to understand and apply the concepts

Network Analysis and Transmission Lines is designed specifically to cater to the needs of third semester students of B.Tech in Electronics and Communication Engineering, JNTU. The book has a perfect blend of focused content and complete coverage of the

syllabus. Simple, easy-to-understand and difficult-jargon-free text elucidates the fundamentals of network analysis and transmission lines. Several solved examples, circuit diagrams and adequate questions further help students understand and apply the concepts efficiently. Highlights: • Comprehensive syllabus coverage • Lucid presentation style • Topics illustrated with diagrams for better understanding • Rich pool of pedagogy: Illustrative Examples, Review Questions and Numerical Problems This book seeks to build fundamental concepts on the subject of Linear Algebra and Partial Differential Equations. Each topic is lucidly and comprehensively explained as well as illustrated with diverse types of solved examples. Step-wise explanation has been provided to the students for the numerous solved examples to create a better understanding of the course. Salient Features include, Strict adherence to latest AU syllabus; Exhaustive coverage on Partial Differential Equations and Fourier Series Solutions of PDE; Diverse and useful pedagogy such as Important points highlighted within text, short answer, questions, numerous solved examples for quick understanding.

Covering the fundamentals of electrical technology and using these to introduce the application of electrical and electronic systems, this text had been updated to include recent developments in technology. It avoids unnecessary mathematics and features improved teaching aids, including: worked examples; updated and

graded review questions; colour diagrams and chapter summaries. It is designed for use by students on NC, HNC and HND courses in electrical and electronic engineering.

Designed For Entry-Level Engineering Students, This Book Presents A Thorough Exposition Of Electrical, Electronics, Computer And Communication Engineering. Simple Language Has Been Used Throughout The Book And The Fundamental Concepts Have Been Systematically Highlighted * This Edition Includes New Chapters On * Transmission And Distribution * Communication Services * Linear And Digital Integrated Circuits * Sequential Logic System * The Book Also Includes * Large Number Of Diagrams For A Clear Understanding Of The Subject * Cumerous Solved Examples Illustrating Basic Concepts And Techniques * Exercises And Review Questions With Answers * Revision Formulae For Quick Review And Recall All These Features Make This Book An Ideal Text For Both Degree And Diploma Students Engineering.

Basic Electrical and Electronics Engineering provides an overview of the basics of electrical and electronic engineering that are required at the undergraduate level. The book allows students outside electrical and electronics engineering to easily

The book is designed for students studying the course on Electronic Circuits – 1.

The topics have been organized in a sequential manner to enhance the understanding of the fundamentals of the subject. A wide variety of solved examples have been provided with step-by-step solutions, which will enable the students in a better understanding of the course.

This book is a sequel to the author's DC Machines & Transformers.

Comprehensive, lucid and student-friendly, it adopts a self-study approach and is aimed at demystifying the subject for students who consider 'Electric Machines' too tough. The book covers Induction Machines in 8 chapters and Synchronous Machines in 9 chapters.

This book is primarily designed to serve as a textbook for undergraduate students of electrical, electronics, and computer engineering, but can also be used for primer courses across other disciplines of engineering and related sciences. The book covers all the basic aspects of electronics engineering, from electronic materials to devices, and then to basic electronic circuits. The book can be used for freshman (first year) and sophomore (second year) courses in undergraduate engineering. It can also be used as a supplement or primer for more advanced courses in electronic circuit design. The book uses a simple narrative style, thus simplifying both classroom use and self study. Numerical values of dimensions of the devices, as well as of data in figures and graphs

have been provided to give a real world feel to the device parameters. It includes a large number of numerical problems and solved examples, to enable students to practice. A laboratory manual is included as a supplement with the textbook material for practicals related to the coursework. The contents of this book will be useful also for students and enthusiasts interested in learning about basic electronics without the benefit of formal coursework.

Electronic Devices and Circuits is designed specifically to cater to the needs of the students of B.Tech. in Electronics and Communication Engineering. The book has a perfect blend of focused content and complete coverage. Simple, easy-to-understand and jargon-free text elucidates the fundamentals of electronics. Several solved examples, circuit diagrams and adequate questions further help students understand and apply the concepts Salient Features:

- Comprehensive coverage of syllabus requirements
- Topics illustrated with diagrams for better understanding
- Equal emphasis on mathematical derivations and physical interpretations

Digital Signal Processing is a trademark book that covers all the fundamentals of the area in a well arranged and lucid manner. This fourth edition has been carefully revised to update the text with the latest developments in the field. Enriched with a large number of well-designed problems and MATLAB programs, the book offers a right blend of theory and application. The book is suitable as a text for subjects Signals and Systems and Digital Signal Processing in B.E./B.Tech., AMIE and Grade IETE degree programs, and for the subject Advanced Digital Signal Processing in the M.E./M.Tech. degree program. It will also serve as a useful reference

to those preparing for competitive examinations. Salient Features: 1. Detailed coverage of latest AICTE model curriculum 2. Digital Signal Processing presented with an application-based approach 3. Learning Objective (LOs) and Level of Difficulty (LODs) added to render clarity and preciseness 4. Newly written and updated chapters on Continuous Time Signals, Discrete Fourier Transform, and Fast Fourier Transform 5. Expanded coverage on topics like Convolution, ROC for Laplace Transform, Goertzel algorithm, BIBO stability, Filter structures, etc. 6. Updated MATLAB Programs along with their outputs

Comprehensive, lucid and student-friendly in the true sense, DC Machines and Transformers adopts a self-study approach and is aimed at demystifying the subject for students who consider ?Electric Machines? too tough. This second edition has been thoroughly revised and includes a summary at the end of each chapter, many short and long answer questions taken from question papers of various universities? over the last 25 years.

The fundamentals and implementation of digital electronics are essential to understanding the design and working of consumer/industrial electronics, communications, embedded systems, computers, security and military equipment. Devices used in applications such as these are constantly decreasing in size and employing more complex technology. It is therefore essential for engineers and students to understand the fundamentals, implementation and application principles of digital electronics, devices and integrated circuits. This is so that they can use the most appropriate and effective technique to suit their technical need. This book provides practical and comprehensive coverage of digital electronics, bringing together information on fundamental theory, operational aspects and potential applications. With worked problems, examples, and review questions for each chapter, Digital Electronics includes: information on

number systems, binary codes, digital arithmetic, logic gates and families, and Boolean algebra; an in-depth look at multiplexers, de-multiplexers, devices for arithmetic operations, flip-flops and related devices, counters and registers, and data conversion circuits; up-to-date coverage of recent application fields, such as programmable logic devices, microprocessors, microcontrollers, digital troubleshooting and digital instrumentation. A comprehensive, must-read book on digital electronics for senior undergraduate and graduate students of electrical, electronics and computer engineering, and a valuable reference book for professionals and researchers.

Electromagnetic Field Theory is a single textbook catering to the electromagnetic field fundamentals for B.E./B.Tech. in Electronics and Communication Engineering, Electronics and Telecommunication Engineering, Electrical and Electronics Engineering and M.Sc.

(Electronics) of various Indian Universities. The primary goal of the text is to provide deep knowledge on the subject with rich pedagogy and it is also a useful reference for GATE, UPSC aspirants. The book provides an organized and balanced presentation to cover the entire syllabus of Electromagnetic Field Theory. Each Chapter of the book begins with a brief introduction, contains numerous practice problems and ends with review questions. The fundamental concepts and related derivations with necessary illustrations are provided in a simple and comprehensive manner to make the students understand the subject.

Basic Electrical and Electronics Engineering for JNTUMcGraw-Hill Education

The Use Of Digital Circuits Is Increasing In All Disciplines Of Engineering. Consequently Students Need To Have An In-Depth Knowledge On Them. Digital Circuits And Design Is A Textbook Dealing With The Basics Of Digital Technology Including The Design Asp

The book provides a deep understanding for the concepts and advancements of the subject to students pursuing the course on Signals and Systems. It is an easy to understand text with to-the-point explanation, which will help students. With the inclusion of numerous solved examples, students will be able to develop a logical outlook of the subject.

This book on “Electronic Circuit Analysis” explores the concepts of Circuit Analysis in a simple and easy-to-understand manner. This book is designed specifically to cater to the needs of fourth semester students of B.Tech in Electronics and Communications Engineering, JNTU. Written in a lucid language, this book offers a crisp presentation of all the topics supported by adequate examples. A simplified approach to enable ease of understanding of the concepts, adequate illustrations, examples and practice problems have also been provided in all the chapters. Salient Features: ? Comprehensive coverage with lucid presentation style ? Rich exam-oriented pedagogy ? Solved Numerical Examples within chapters ? Unsolved Review Questions ? Multi-choice Questions

Analog and Digital Electronics is designed specifically to cater to the needs of third Semester students of B.Tech. in Computer Science and Engineering, JNTU. The book has a perfect blend of focused content and complete coverage as per

the syllabus. Simple, easy-to-understand and difficult-jargon-free text elucidates the fundamentals of analog and digital electronics. Several solved examples, including circuit diagrams and adequate questions further help students understand and apply the concepts. Few Highlights: • Comprehensive syllabus coverage as per latest pattern • Lucid presentation style • Rich pool of pedagogy: Illustrative Examples and Review Questions

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