

Solution Of Basic Electrical Engineering By Dc Kulshreshtha

Eventually, you will enormously discover a other experience and completion by spending more cash. nevertheless when? do you undertake that you require to acquire those every needs afterward having significantly cash? Why dont you attempt to acquire something basic in the beginning? Thats something that will guide you to understand even more roughly the globe, experience, some places, bearing in mind history, amusement, and a lot more?

It is your categorically own become old to function reviewing habit. in the course of guides you could enjoy now is **Solution Of Basic Electrical Engineering By Dc Kulshreshtha** below.

Basic Electrical Engineering - Mehta V.K. & Mehta Rohit 2008

For close to 30 years, □Basic Electrical Engineering□ has been the go-to text for students of Electrical Engineering. Emphasis on concepts and clear mathematical derivations, simple language coupled with systematic development of the subject aided by illustrations makes this text a fundamental read on the subject. Divided into 17 chapters, the book covers all the major topics such as DC Circuits, Units of Work, Power and Energy, Magnetic Circuits, fundamentals of AC Circuits and Electrical Instruments and Electrical Measurements in a straightforward manner for students to understand.

Basic Electrical Engineering - Arthur Eugene Fitzgerald 1981

Grob's Basic Electronics - Mitchel E. Schultz 2006-06

Grob's Basic Electronics, Tenth Edition, is written for the beginning student pursuing a technical degree in Electronics Technology. In covering the fundamentals of electricity and electronics, this text focuses on essential topics for the technician, and the all-important development of testing and troubleshooting skills. This highly practical approach combines clear, carefully-laid-out explanations of key topics with good, worked-out examples and problems to solve. Review problems that follow each section reinforce the material just completed, making this a very student-friendly text. It is a thoroughly accessible introduction to basic DC and AC circuits and electronic devices. This tenth edition of this longtime best-selling text has been refined, updated and made more student friendly. The focus on absolutely essential knowledge for technicians, and focus on real-world applications of these basic concepts makes it ideal for today's technology students.

Basic Concepts of Electrical Engineering - Kuldeep Sahay 2006

This Book Presents A Practical-Oriented, Sound, Modularized Coverage Of Fundamental Topics Of Basic Electrical Engineering, Network Analysis & Network Theorems, Electromagnetism & Magnetic Circuit, Alternating Current & Voltages, Electrical Measurement & Measuring Instrument And Electric Machines. Salient Features: # Clarification Of Basic Concepts# Several Solved Examples With Detailed Explanation# At The End Of Chapters, There Are Descriptive And Numerical Unsolved Problems# Written In Very Simple Language And Suitable For Self-Study# Step-By-Step Procedures Given For Solving Numerical

A Textbook of Electrical Technology - Volume I (Basic Electrical Engineering) - BL Theraja 2005

The primary objective of vol. I of A Text Book of Electrical Technology is to provided a comprehensive treatment of topics in Basic Electrical Engineering both for electrical aswell as nonelectrical students pursuing their studies in

civil,mechnacial,mining,textttile,chemical,industrial,nviromental,aerospace,electronicand computer engineering both at the Degree and diplomalevel. Based on the suggestions received from our esteemed readers,both from India and abroad,the scope of the book hasbeen enlarged according to their requirements.Almost half the solved examples have been deleted and replaced by latest examination papers set upto 1994 in different engineering collage and technical institutions in India and abroad.

Basic Electrical Engineering | AICTE Prescribed Textbook (English) - S.K. Sahdev 2021-08-27

This textbook "Basic Electrical Engineering" is based on the latest syllabus of the Universities, AICTE and Educational Institutes. In this edition, some material of the book has been rewritten to make the

presentation easily comprehensible. More illustrative examples mainly from IAS, IES and GATE and other competitive examinations have been added. Various problems with answers have been added to support the text. For quick revision, summary/highlights are given at the end of each chapter. Salient Features: · DC Circuits · AC Circuits · Transformers · Electrical Machines · Power converters · Electrical Installations
Basic Electrical Engineering - Uday A. Bakshi 2020-11-01

The book is written for an undergraduate course on the Basic Electrical Engineering. It provides comprehensive explanation of theory and practice of electrical engineering. It elaborates various aspects of d.c. and a.c. circuit analysis, magnetic circuits, measuring instruments, single phase transformers and various electrical machines. The book starts with the concepts of electric charge, current and potential difference. It explains Kirchhoff's laws, star-delta transformation, mesh analysis and node analysis. It also covers the application of various network theorems in analyzing d.c. circuits. The book incorporates detailed discussion of steady state analysis of single-phase series and parallel a.c. circuits along with the resonance. The book also explains the three phase balanced circuits, three phase power measurement and power factor improvement. The simple techniques and stepwise methods used to explain the phasor diagrams is the feature of the book. The book teaches the theory of various electrical measuring instruments. The book also covers the concept of earthing and electrical safety, which is most important while dealing with the electrical equipment's. The book also includes the discussion of magnetic circuits, self and mutual inductances and magnetic hysteresis. The book further explains the details of single-phase transformers and various electrical machines such as d.c. machines, three phase and single-phase induction motors and synchronous machines. The brief introduction of power system is also incorporated in the book. 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. All the chapters are arranged in a proper sequence that permits each topic to build upon earlier studies. The variety of solved examples is the feature of this book which helps to inculcate the knowledge of the basic electrical engineering in the students. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

Schaum's Outline of Basic Electrical Engineering - J. J. Cathey 1997

A comprehensive guide to electrical engineering.

Advanced Electrical Circuit Analysis - Mehdi Rahmani-Andebili 2021-07-21

This study guide is designed for students taking advanced courses in electrical circuit analysis. The book includes examples, questions, and exercises that will help electrical engineering students to review and sharpen their knowledge of the subject and enhance their performance in the classroom. Offering detailed solutions, multiple methods for solving problems, and clear explanations of concepts, this hands-on guide will improve student's problem-solving skills and basic understanding of the topics covered in electric circuit analysis courses.

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Includes Part 1, Number 1 & 2: Books and Pamphlets, Including Serials and Contributions to Periodicals (January - December)

Electrical Engineering 101 - Darren Ashby 2011-10-13

Electrical Engineering 101 covers the basic theory and practice of electronics, starting by answering the

question "What is electricity?" It goes on to explain the fundamental principles and components, relating them constantly to real-world examples. Sections on tools and troubleshooting give engineers deeper understanding and the know-how to create and maintain their own electronic design projects. Unlike other books that simply describe electronics and provide step-by-step build instructions, EE101 delves into how and why electricity and electronics work, giving the reader the tools to take their electronics education to the next level. It is written in a down-to-earth style and explains jargon, technical terms and schematics as they arise. The author builds a genuine understanding of the fundamentals and shows how they can be applied to a range of engineering problems. This third edition includes more real-world examples and a glossary of formulae. It contains new coverage of: Microcontrollers FPGAs Classes of components Memory (RAM, ROM, etc.) Surface mount High speed design Board layout Advanced digital electronics (e.g. processors) Transistor circuits and circuit design Op-amp and logic circuits Use of test equipment Gives readers a simple explanation of complex concepts, in terms they can understand and relate to everyday life. Updated content throughout and new material on the latest technological advances. Provides readers with an invaluable set of tools and references that they can use in their everyday work.

Basic Electrical Engineering - R. K. Rajput 2009-02

Basic Electrical Engineering - K. N. Srinivas 2013-12-30

The aim of this book is to provide a consolidated text for the first year B.E. Computer Science and Engineering students and B.Tech Information Technology students of Anna University. The syllabus has been thoroughly revised for the non-semester yearly pattern by the University. The book, made up of five chapters, systematically covers the five units of the syllabus. It begins with a detailed discussion on the fundamentals of electric circuits. DC circuits, AC circuits, 3-phase circuits, resonance and the network theorems. Lecture-type presentation of the rudiments of the fundamentals in conjunction with hundreds of solved examples is the strength of this book. Magnetic circuits and various magnetic elements and their properties, with number of illustrations are presented. DC machines and transformers are further dealt with. Equivalent circuits of machines supported with the respective photographs will ease the reader to understand the concepts of machines much better. Synchronous machines and asynchronous machines and fundamentals of control systems with various practical examples and relevant worked illustrations conclude this book. A large number of numerical illustrations and diagrammatic representations make this book valuable for students and teachers.

Basic Electrical and Electronics Engineering - S. K. Bhattacharya 2011

This book provides an overview of the basics of electrical and electronic engineering that are required at the undergraduate level. Efforts have been taken to keep the complexity level of the subject to bare minimum so that the students of non electrical/electronics can easily understand the basics. It offers an unparalleled exposure to the entire gamut of topics such as Electricity Fundamentals, Network Theory, Electro-magnetism, Electrical Machines, Transformers, Measuring Instruments, Power Systems, Semiconductor Devices, Digital Electronics and Integrated Circuits.

The Vocational-technical Library Collection - Bruce Reinhart 1970

Practical Electrical Engineering - Sergey N. Makarov 2019-02-28

This new edition of a proven textbook provides comprehensive, in-depth coverage of the fundamental concepts of electrical and computer engineering. It is written from an engineering perspective, with special emphasis on circuit functionality and applications. Reliance on higher-level mathematics and physics, or theoretical proofs has been intentionally limited in order to prioritize the practical aspects of electrical engineering. This text is therefore suitable for a number of introductory circuit courses for other majors such as robotics, mechanical, biomedical, aerospace, civil, architecture, petroleum, and industrial engineering. The authors' primary goal is to teach the aspiring engineering student all fundamental tools needed to understand, analyze and design a wide range of practical circuits and systems. Their secondary goal is to provide a comprehensive reference, for both major and non-major students as well as practicing engineers.

Fundamentals of Electrical Engineering and Electronics - BL Theraja 2006-06

This Book extensive pruning of the solved Examples in the text. Majority of the old examples have been replaced by questions set in the latest examination papers of different engineering colleges and technical institutions.

Introduction to Electrical Circuit Analysis - Ozgur Ergul 2017-06-26

A concise and original presentation of the fundamentals for 'new to the subject' electrical engineers This book has been written for students on electrical engineering courses who don't necessarily possess prior knowledge of electrical circuits. Based on the author's own teaching experience, it covers the analysis of simple electrical circuits consisting of a few essential components using fundamental and well-known methods and techniques. Although the above content has been included in other circuit analysis books, this one aims at teaching young engineers not only from electrical and electronics engineering, but also from other areas, such as mechanical engineering, aerospace engineering, mining engineering, and chemical engineering, with unique pedagogical features such as a puzzle-like approach and negative-case examples (such as the unique "When Things Go Wrong..." section at the end of each chapter). Believing that the traditional texts in this area can be overwhelming for beginners, the author approaches his subject by providing numerous examples for the student to solve and practice before learning more complicated components and circuits. These exercises and problems will provide instructors with in-class activities and tutorials, thus establishing this book as the perfect complement to the more traditional texts. All examples and problems contain detailed analysis of various circuits, and are solved using a 'recipe' approach, providing a code that motivates students to decode and apply to real-life engineering scenarios Covers the basic topics of resistors, voltage and current sources, capacitors and inductors, Ohm's and Kirchhoff's Laws, nodal and mesh analysis, black-box approach, and Thevenin/Norton equivalent circuits for both DC and AC cases in transient and steady states Aims to stimulate interest and discussion in the basics, before moving on to more modern circuits with higher-level components Includes more than 130 solved examples and 120 detailed exercises with supplementary solutions Accompanying website to provide supplementary materials www.wiley.com/go/ergul4412

Basic Electronics - Frank Pugh 1998-10

Basic Electrical Engineering - Dr. Ramana Pilla, Dr. M Surya Kalavathi & Dr. G T Chandra Sekhar

This book is designed based on revised syllabus of JNTU, Hyderabad (AICTE model curriculum) for undergraduate (B.Tech/BE) students of all branches, those who study Basic Electrical Engineering as one of the subject in their curriculum. The primary goal of this book is to establish a firm understanding of the basic laws of Electric Circuits, Network Theorems, Resonance, Three-phase circuits, Transformers, Electrical Machines and Electrical Installation.

DIRECT CURRENT CIRCUITS ANALYSIS, Vol. 2 - Demetrios P. Kanoussis 2018-10-16

The Direct Current Circuits play an important role because, i) One can lay out the fundamental methods, techniques and theorems governing the operation of all types of circuits, but since in the DC case, the mathematics involved are rather simple, the DC circuits may serve as an introduction to the study of more complicated types of circuits. ii) The DC circuits are widely used in every day practical applications. The reader who will understand the operation of the DC circuits, will be able to follow rather easily more complicated cases, where the electrical signals $v(t)$ and $i(t)$ vary with time. In these cases, the study of the circuits is implemented by means of differential or even integro-differential equations, the solution of which is not an easy task. In this text we develop some systematic methods for the analysis of DC Circuits, by means of which one may write by inspection the governing circuit equations, and then proceed to the solution. Given that the circuits we consider are Linear Circuits, it turns out that the sought for equations for the voltages and / or the currents involved are linear equations, which can be expressed briefly and compactly, making use of Matrix Notation. Matrix Theory is therefore a valuable tool in analyzing Linear DC Circuits. In Chapter 1 we give a brief but systematic review of Matrix Theory, operation with Matrices, Determinants, Matrix Solution of Linear Systems, the Cramer's Rule, etc. In Chapter 2 we develop the Mesh or Loop Analysis method, which is based on the notion of Loop Currents and is ideal for circuits containing voltage sources only, In Chapter 3 we develop the Nodal Analysis method, which is based on the notion of Nodal Potential and is ideal for circuits containing current sources only, In Chapter 4 we show

how to convert a realistic voltage source into an equivalent current source, and vice versa, In Chapter 5 we state and prove the Millman's Theorem, which reduces parallel connected realistic voltage sources to an equivalent single voltage source, In Chapter 6 we state and develop the extremely important Superposition Principle, which is widely used if the circuit contains both voltage and current sources, In Chapter 7 we state and prove the extremely powerful in circuit analysis Thevenin's Theorem, In Chapter 9 we state and prove the extremely powerful in circuit analysis Norton's Theorem, which is actually the dual of Thevenin's Theorem, In Chapter 10 we state and prove the so called Kennelly's Theorem, by means of which one may transform a Y (wye) circuit to a Δ (delta) circuit and vice versa, In Chapter 11 we state some more general problems, of increased complexity, the solution of which requires a suitable application of various circuit analysis methods, techniques and theorems, developed in the previous chapters. The 30 illustrative solved Examples and the 105 characteristic Problems to be solved are design to help students develop a solid theoretical background, broaden their knowledge and sharpen their analytical skills on the subject. A brief Hint or detailed outline of the procedure to follow, in solving complicated problems is often given. Finally answers to all problems are given, so that the students can verify the validity of their own solution. In our e-book INTRODUCTION TO ELECTRIC CIRCUITS THEORY, Vol. 1 (May 2017), the interested reader may find all fundamental concepts and definitions pertaining to the study of electric circuits (resistors, capacitors, inductors, electrical power and energy, voltage and current sources both independent and controlled and their mathematical models, transients in simple R-C or R-L circuits, etc). This will help the reader to understand easier the current text.

Basic Electrical Engineering Semester-II (RTM) Nagpur University - B L Theraja, Kiran Manish Kimmatkar, Umesh E. Hiwase & A K Theraja

"Basic Electrical Engineering" is written exclusively for B. Tech. Second semester students of various branches as per the revised syllabus of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur (RTMNU, Nagpur). Each of the important topics that help the student in learning the principles of Electrical Engineering more effectively have been included.

BASIC ELECTRICAL ENGINEERING - Dr. K. A. Navas 2018-08-01

This book is prepared as per the syllabus of Dr A P J Abdul Kalam Technical University, Uttar Pradesh for first year B. Tech (Engineering) course using the reference books given in the course syllabus. Authors have tried to elucidate the topics such a way that even a mediocre student can assimilate them. Many solved problems, sample question papers and exercise given in every section will provide a thorough understanding of topics

Basic Electrical Engineering - J. P. Tewari 2003

This Book Is Written For Use As A Textbook For The Engineering Students Of All Disciplines At The First Year Level Of The B.Tech. Programme. The Text Material Will Also Be Useful For Electrical Engineering Students At Their Second Year And Third Year Levels. It Contains Four Parts, Namely, Electrical Circuit Theory, Electromagnetism And Electrical Machines, Electrical Measuring Instruments, And Lastly The Introduction To Power Systems. This Book Also Contains A Good Number Of Solved And Unsolved Numerical Problems. At The End Of Each Chapter References Are Included For Those Interested In Pursuing A Detailed Study.

A Programmed Review for Electrical Engineering - James H. Bentley 1984-06

The field of electrical engineering is very innovative-new products and new ideas are continually being developed. Yet all these innovations are based on the fundamental principles of electrical engineering: Ohm's law, Kirchhoff's laws, feedback control, waveforms, capacitance, resistance, inductance, electricity, magnetism, current, voltage, power, energy. It is these basic fundamentals which are tested for in the Professional Engineering Examination (PE Exam). This text provides an organized review of the basic electrical engineering fundamentals. It is an outgrowth of an electrical engineering refresher course taught by the author to candidates preparing for the Professional Engineering Examination-a course which has enabled scores of electrical engineers in Minnesota and Wisconsin to successfully pass the PE Exam. The material is representative of the type of questions appearing in the PE Exams prepared by the National Council of Engineering Examiners (NCEE) over the past twelve years. Each problem in the text has been carefully selected to illustrate a specific concept. Included with each problem is at least one solution.

Although the solutions have been carefully checked, both by the author and by students, there may be differences of interpretation. Also, in some cases certain assumptions may need to be made prior to problem solution, and since these to individual, the final answer may also differ. The assumptions will vary from individual author has attempted to keep the requirements for assumptions and interpretation to a minimum.

Basic Electrical and Electronics Engineering - R. K. Rajput 2012

Comprehensive Basic Electrical Engineering - R.K. Rajput 2005

DC Electrical Circuit Analysis - Mehdi Rahmani-Andebili 2020-10-09

This study guide is designed for students taking courses in electrical circuit analysis. The book includes examples, questions, and exercises that will help electrical engineering students to review and sharpen their knowledge of the subject and enhance their performance in the classroom. Offering detailed solutions, multiple methods for solving problems, and clear explanations of concepts, this hands-on guide will improve student's problem-solving skills and basic understanding of the topics covered in electric circuit analysis courses.

Schaum's Outline of Basic Electricity, Second Edition - Milton Gussow 2009-12-18

Confused by basic electricity concepts? Problem solved Schaum's Outline of Basic Electricity covers the fundamentals of electricity and electric circuits. Written as a complement to vocational and technical courses, the book reviews digital and computer technology and the more advanced level of expertise required of technicians in these fields. Chapters focus on particular subjects as they are related to electric circuits, so you can target specific areas or tackle the subject as a whole. You will also learn how to solve circuit values in more complex series and parallel circuits.

THEORY AND PROBLEMS OF BASIC ELECTRICAL ENGINEERING., Second Edition - NAGRATH, I. J. 2016-08-19

This comprehensive book with a blend of theory and solved problems on Basic Electrical Engineering has been updated and upgraded in the Second Edition as per the current needs to cater undergraduate students of all branches of engineering and to all those who are appearing in competitive examinations such as AMIE, GATE and graduate IETE. The text provides a lucid yet exhaustive exposition of the fundamental concepts, techniques and devices in basic electrical engineering through a series of carefully crafted solved examples, multiple choice (objective type) questions and review questions. The book covers, in general, three major areas: electric circuit theory, electric machines, and measurement and instrumentation systems.

Parker Smith's Five Hundred Solutions of Problems in Electrical Engineering - V. C. Natesan 1994

Basic Electrical Engineering - C.L. Wadhwa 2006

Basic Electrical Engineering Has Been Written As A Core Course For All Engineering Students Viz. Electronics And Communication Engineering, Computer Engineering, Civil Engineering, Mechanical Engineering Etc. Since This Course Will Normally Be Offered At The First Year Level Of Engineering, The Author Has Made Modest Effort To Give In A Concise Form, Various Features Of Basic Electrical Engineering Using Simple Language And Through Solved Examples, Avoiding The Rigorous Of Mathematics. The Salient Features Of The Book Are : * Steady State Analysis Of A.C. Circuits Explained. * Network Theorems Explained Using Typical Examples. * Analysis Of 3-Phase Circuits And Measurement Of Power In These Circuits Explained. * Measuring Instruments Like Ammeter, Voltmeter, Wattmeter And Energy Meter Described. * Various Electrical Machines Viz. Transformers, D.C. Machines, Single Phase And Three Phase Induction Motors, Synchronous Machines, Servomotors Have Been Described. * A Brief View Of Power System Including Conventional And Non-Conventional Services Of Electric Energy Is Given. * Domestic Wiring Has Been Discussed. * Numerous Solved Examples And Practice Problems For Thorough Grasp Of The Subject Presented. * A Large Number Of Multiple Choice Questions With Answers Given.

Fundamentals of Electrical Engineering and Electronics (LPSPE) - Theraja B.L. 2022

□Fundamentals of Electrical Engineering and Electronics□ is a useful book for undergraduate students of

electrical engineering and electronics as well as B.Sc. Electronics. The book discusses concepts such as Network Analysis, Capacitance, Electromagnetic Induction, Motors Circuits and Diodes in an easy to relate and thereby understand manner. Designed in accordance with the syllabi of most major universities, the book is an essential resource for anyone aspiring to learn the fundamentals and teaches students much about the subject itself. A book which has seen, foreseen and incorporated changes in the subject for more than 50 years, it continues to be one of the most sought after texts by the students.

Basic Concepts of Electrical Engineering - P S Subramanyam 2016-09

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 Electrical and Electronics Engineering - R.K. Rajput 2007

THEORY AND PROBLEMS OF BASIC ELECTRICAL ENGINEERING - D. P. KOTHARI 1998-01-01

For the first time in India, we have a comprehensive introductory book on Basic Electrical Engineering that caters to undergraduate students of all branches of engineering and to all those who are appearing in competitive examinations such as AMIE, GATE and graduate IETE. The book provides a lucid yet exhaustive exposition of the fundamental concepts, techniques and devices in basic electrical engineering through a series of carefully crafted solved examples, multiple choice (objective type) questions and review questions. The book covers, in general, three major areas: electric circuit theory, electric machines, and measurement and instrumentation systems.

Basic Electrical Engineering - Ritu Sahdev

Although, a number of books, written by various authors on the subject are available in the market.

However, the author feels that this book will facilitate the students not only to prepare for the regular University examinations. The book is also quite suitable for the professionals since many live examples have been incorporated. The book has the following exclusive features: (i) The Learning objectives of each chapter have been incorporated in the beginning to develop curiosity among the students. (ii) Practice exercise have been added in all the chapters after suitable intervals to impart necessary practice. (iii) At the end of each chapter, its summary highlights are given. This will enable the students to revise the subject matter quickly. (iv) A number of short answer and test questions have been given at the end of each chapter. While answering these questions, the readers will have to think deep into the subject matter. This will improve their analytical approach. Consequently, the students/readers will be in position to respond in a better way while appearing before the selection board or to deal with practical problems. (v) A sufficient number of objective type questions (MCQ) have been given at the end of each chapter. These questions will help the students to perform better in the competitive examinations. (vi) The subject matter is treated in a

simple and lucid manner so that an average student can understand the subject easily. Although, typical mathematical expressions are avoided but simple mathematical relations are used for better explanation and understanding.

Solutions Manual to Accompany Basic Electrical Engineering, Fourth Edition - Arthur Eugene Fitzgerald 1975

Basic Electrical Engineering - SINGH, S. N. 2011

This book presents comprehensive coverage of all the basic concepts in electrical engineering. It is designed for undergraduate students of almost all branches of engineering for an introductory course in essentials of electrical engineering. This book explains in detail the properties of different electric circuit elements, such as resistors, inductors and capacitors. The fundamental concepts of dc circuit laws, such as Kirchhoff's current and voltage laws, and various network theorems, such as Thevenin's theorem, Norton's theorem, superposition theorem, maximum power transfer theorem, reciprocity theorem and Millman's theorem are thoroughly discussed. The book also presents the analysis of ac circuits, and discusses transient analysis due to switch operations in ac and dc circuits as well as analysis of three-phase circuits. It describes series and parallel RLC circuits, magnetic circuits, and the working principle of different kinds of transformers. In addition, the book explains the principle of energy conversion, the operating characteristics of dc machines, three-phase induction machines and synchronous machines as well as single-phase motors. Finally, the book includes a discussion on technologies of electric power generation along with the different types of energy sources. Key Features : Includes numerous solved examples and illustrations for sound conceptual understanding. Provides well-graded chapter-end problems to develop the problem-solving capability of the students. Supplemented with three appendices addressing matrix algebra, trigonometric identities and Laplace transforms of commonly used functions to help students understand the mathematical concepts required for the study of electrical engineering.

Fundamentals of Electrical Engineering, Part 1 - S. B. Lal Seksena 2017-02-07

The understanding of fundamental concepts of electrical engineering is necessary before moving on to more advanced concepts. This book is designed as a textbook for an introductory course in electrical engineering for undergraduate students from all branches of engineering. The text is organized into fourteen chapters, and provides a balance between theory and applications. Numerous circuit diagrams and explicit illustrations add to the readability of the text. The authors have covered some important topics such as electromagnetic field theory, electrostatics, electrical circuits, magnetostatics, network theorems, three-phase systems and electrical machines. A separate chapter on measurement and instrumentation covers important topics including errors in measurement, electro-mechanical indicating instruments, current transformers and potential transformers in detail. Pedagogical features are interspersed throughout the book for better understanding of concepts.