

# Electronic Circuit Analysis Jntu

**Network Analysis (As Per Latest Jntu Syllabus) NETWORK ANALYSIS-JNTU 4E** *Electronic Circuit Analysis: Electronic Circuit Analysis Circuits and Networks Electronic Devices and Circuits Networks and Systems Introduction to Circuit Analysis and Design Power Electronics PULSE AND DIGITAL CIRCUITS Analog Circuit Design Schaum's Outline of Theory and Problems of Electric Circuits Electronic Circuit Analysis Electronic Circuit Analysis and Design Electrical Circuit Analysis Electronic Circuits-I Power System Analysis Analog and Digital Circuits for Electronic Control System Applications Switchgear & Protection Linear Circuit Analysis Digital Circuits And Design, 3E A Textbook of Applied Electronics (LPSPE) A Textbook of Applied Electronics Basic Electrical Engineering Circuits and Networks: switching theory & logic design Electronic Devices and Integrated Circuits Managerial Economics And Financial Analysis SWITCHING THEORY AND LOGIC DESIGN Engineering Circuit Analysis Linear Integrated Circuits And Applications Networks, Lines and Fields Electronic Circuit Analysis Building Construction Handbook Design of Analog CMOS Integrated Circuits NETWORK THEORY Signals & Systems Low-Power VLSI Circuits and Systems ELECTRONICS LAB MANUAL (VOLUME 2) Electrical Circuit Theory and Technology*

Right here, we have countless book **Electronic Circuit Analysis Jntu** and collections to check out. We additionally provide variant types and with type of the books to browse. The enjoyable book, fiction, history, novel, scientific research, as capably as various other sorts of books are readily approachable here.

As this Electronic Circuit Analysis Jntu, it ends in the works being one of the favored ebook Electronic Circuit Analysis Jntu collections that we have. This is why you remain in the best website to look the unbelievable ebook to have.

*Signals & Systems* Sep 25 2019 This authoritative book, highly regarded for its intellectual quality and contributions provides a solid foundation and life-long reference for anyone studying the most important methods of modern signal and system analysis. The major changes of the revision are reorganization of chapter material and the addition of a much wider range of difficulties.

**Electrical Circuit Analysis** Aug 17 2021 It is divided into two parts covering the topics of Electrical Circuit Analysis for the two semesters of second year. The material presented in this book is outcome of the vast experience the authors gained while teaching the subject to the undergraduate students for a long time.

**Electronic Circuit Analysis and Design** Sep 17 2021 This junior-level electronics text provides a foundation for analyzing and designing analog and digital electronic circuits. Computer analysis and design are recognized as significant factors in electronics throughout the book. The use of computer tools is presented carefully, alongside the important hand analysis and calculations. The author, Don Neamen, has many years experience as an engineering educator and an engineer. His experience shines through each chapter of the book, rich with realistic examples and practical rules of thumb. The book is divided into three parts. Part 1 covers semiconductor devices and basic circuit applications. Part 2 covers more advanced topics in analog electronics, and Part 3 considers digital electronic circuits.

*Electronic Circuit Analysis* Jul 28 2022

**Linear Integrated Circuits And Applications** Mar 31 2020 Differential Amplifiers Analysis of differential amplifier, common mode and differential mode gains, transfer characteristics, CMRR, I/P and O/P impedances, high performance amplifiers using current source bias and current mirror connection. Drift Problem Thermal drift, input error signals and their compensation in differential amplifier. Operational Amplifier Ideal op-amp characteristics, cascading of differential amplifier. I/P, O/P stages and level translators, multistage op-amps, frequency response and stability. Frequency and phase compensation techniques. Some commercial op-amp parameters, features (IC 741, MC 1530). Op-amp Applications Inverting and non-inverting, differential and bridge amplifiers, summer, integrator, differentiator. V to I and I to V converters, op-amp feedback limiters using diodes, zener diodes, log and antilog amplifiers, analog multipliers, dividers, sample and hold circuits. Peak detectors, precision rectifiers, instrumentation amplifier, monostable and astable multivibrators, comparators-Schmitt trigger using op-amp. Active Filters First and second order Butterworth filters, design and its response (LP, HP, BP, BE, Narrow band, all pass filters). Timers Basic timer circuit 555 timer used as astable and monostable multivibrator. Data Converters and Data Acquisition System D/A converters, basic D/A converter, weighted binary type, ladder R-2R D/A converters, performance parameters and source of errors. A/D Converters Basic V/F converter, V/T converter, single slope and dual slope converter. A/D converter using D/A converter, counter ramp, continuous counter ramp, successive approximation, flash converter. Communication Amplifications Cascade amplifiers MC1550 for video, RF and amplitude modulation, AGC application, PLL, brief study of PLL system, applications of PLL for AM, FM detection, FSK decoder, frequency synthesis using commercial PLL (IC 565). Voltage Regulators Analysis and design of series and shunt regulators using DC amplifiers, some commercial voltage regulators (MC 78XX series, IC 723), high current negative voltage with foldback limiting concepts, switching regulators - basic concepts and applications.

**Network Analysis (As Per Latest Jntu Syllabus)** Oct 31 2022

**Introduction to Circuit Analysis and Design** Mar 24 2022 Introduction to Circuit Analysis and Design takes the view that circuits have inputs and outputs, and that relations between inputs and outputs and the terminal characteristics of circuits at input and output ports are all-important in analysis and design. Two-port models, input resistance, output impedance, gain, loading effects, and frequency response are treated in more depth than is traditional. Due attention to these topics is essential preparation for design, provides useful preparation for subsequent courses in electronic devices and circuits, and eases the transition from circuits to systems.

**ELECTRONICS LAB MANUAL (VOLUME 2)** Jul 24 2019 This book is evolved from the experience of the author who taught all lab courses in his three decades of teaching in various universities in India. The objective of this lab manual is to provide information to undergraduate students to practice experiments in electronics laboratories. This book covers 118 experiments for linear/analog integrated circuits lab, communication engineering lab, power electronics lab, microwave lab and optical communication lab. The experiments described in this book enable the students to learn: • Various analog integrated circuits and their functions • Analog and digital communication techniques • Power electronics circuits and their functions • Microwave equipment and components • Optical communication devices This book is intended for the B.Tech students of Electronics and Communication Engineering, Electrical and Electronics Engineering, Biomedical Electronics, Instrumentation and Control, Computer Science, and Applied Electronics. It is designed not only for engineering students, but can also be used by BSc/MSc (Physics) and Diploma students. **KEY FEATURES** • Contains aim, components and equipment required, theory, circuit diagram, pin-outs of active devices, design, tables, graphs, alternate circuits, and troubleshooting techniques for each experiment • Includes viva voce and examination questions with their answers • Provides exposure on various devices **TARGET AUDIENCE** • B.Tech (Electronics and Communication Engineering, Electrical and Electronics Engineering, Biomedical Electronics, Instrumentation and Control, Computer Science, and Applied Electronics) • BSc/MSc (Physics) • Diploma (Engineering)

**Electronic Circuit Analysis** Jan 28 2020

**Electronic Circuits-I** Jul 16 2021 The book covers all the aspects of theory, analysis, and design of Electronic Circuits for the undergraduate

course. The concepts of biasing of BJT, JFET, MOSFET, along with the analysis of BJT, FET, and MOSFET amplifiers, are explained comprehensively. The frequency response of amplifiers is explained in support. The detailed essential of rectifiers, filters, and power supplies are also incorporated in the book. The book covers biasing of BJT, JFET, and MOSFET and analysis of basic BJT, JFET, and MOSFET amplifiers with Hybrid  $\pi$  equivalent circuits. It also includes the Darlington amplifier discussion, amplifiers using Bootstrap technique, multistage amplifiers, differential amplifiers, and BiCMOS cascade amplifier. The in-depth analysis of the frequency response of various amplifiers is also included in the book. Finally, the book covers all the aspects of rectifiers, types of filters, linear regulators, power supplies, and switching regulators. The book uses straightforward and lucid language to explain each topic. The book provides the logical method of describing the various complicated issues and stepwise methods to make understanding easy. The variety of solved examples is the feature of this book. The book explains the subject's philosophy, which makes understanding the concepts evident and makes the subject more interesting.

switching theory & logic design Sep 05 2020

Electronic Devices and Circuits May 26 2022

Electronic Circuit Analysis Oct 19 2021 Single Stage Amplifiers Review, Small signal analysis of junction transistor, Frequency response of common emitter amplifier, Common base amplifier, Common collector amplifier, JFET amplifiers, Common drain (CD) amplifier, Common gate amplifier, gain band-width product. Multistage Amplifiers Multi stage amplifiers, Methods of inter stage coupling, n-stage cascaded amplifier, Equivalent circuits, Miller's theorem, Frequency effects, Amplifier analysis, High input resistance transistor circuits, Cascode - transistor configuration, CE-CC amplifiers, Two stage RC coupled JFET amplifier (in common source (CS) configuration), Difference amplifier. High Frequency Transistor Circuits Transistor at high frequencies, Hybrid- common emitter, Transconductance model, Determination of hybrid-conductances, Variation of Hybrid parameters with  $|I_C|$ ,  $|V_{CE}|$  and temperature. The parameters  $f_T$ , expression for  $f$ , Current gain with resistance load, CE short circuit current gain, Hybrid - ( $\pi$ ) parameters, Measurement of  $f_T$  variation of Hybrid- parameters with Voltage, Current and temperature, Design of high frequency amplifier. Power Amplifiers Class A power amplifier, Maximum value of efficiency of class a amplifier, Transformer coupled amplifier, Transformer coupled audio amplifier, Push pull amplifier, Complimentary symmetry circuits (Transformer less class B power amplifier), Phase inverters, Class D operation, Class S operation, Heat sinks. Tuned Amplifiers - I Single tuned capacitive coupled amplifier, Tapped single tuned capacitance coupled amplifier, Single tuned transformer coupled or inductively coupled amplifier, CE double tuned amplifier, Application of tuned amplifiers. Tuned Amplifiers - II Stagger tuning, Stability considerations, Tuned Class B and Class C amplifiers, Wideband amplifiers, Tuned amplifiers. Voltage Regulators Terminology, Basic regulator circuit, Short circuit protection, Current limiting, Specifications of voltage regulator circuits, Voltage multipliers. Switching and IC Voltage Regulators IC 723 voltage regulators and three terminal IC regulators, DC to DC converter, Switching regulators, Voltage Multipliers, UPS, SMPS.

Basic Electrical Engineering Nov 07 2020 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.

Power System Analysis Jun 14 2021 This updated edition includes: coverage of power-system estimation, including current developments in the field; discussion of system control, which is a key topic covering economic factors of line losses and penalty factors; and new problems and examples throughout.

**Design of Analog CMOS Integrated Circuits** Nov 27 2019 This textbook deals with the analysis and design of analog CMOS integrated circuits, emphasizing recent technological developments and design paradigms that students and practicing engineers need to master to succeed in today's industry. Based on the author's teaching and research experience in the past ten years, the text follows three general principles: (1) Motivate the reader by describing the significance and application of each idea with real-world problems; (2) Force the reader to look at concepts from an intuitive point of view, preparing him/her for more complex problems; (3) Complement the intuition by rigorous analysis, confirming the results obtained by the intuitive, yet rough approach.

**NETWORK ANALYSIS-JNTU 4E** Sep 29 2022 This book on Network Analysis has been designed keeping in mind the students who take up this foundation course in their first semester at JNTU. Focused coverage of syllabus, variety of solved problems from previous years question papers and right level of theory makes this book very student friendly.

**A Textbook of Applied Electronics (LPSPE)** Jan 10 2021 For close to 30 years, "A Textbook of Applied Electronics" has been a comprehensive text for undergraduate students of Electronics and Communications Engineering. The book comprises of 35 chapters, all delving on important concepts such as structure of solids, DC resistive circuits, PN junction, PN junction diode, rectifiers and filters, hybrid parameters, power amplifiers, sinusoidal oscillators, and time base circuits. In addition, the book consists of several chapter-wise questions and detailed diagrams to understand the complex concepts of applied electronics better. This book is also becomes an essential-read for aspirants preparing for competitive examinations like GATE and NET.

**A Textbook of Applied Electronics** Dec 09 2020 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 mistake and misprints, which has crept in, have been eliminated in this edition.

**Circuits and Networks** Jun 26 2022 Part of the McGraw-Hill Core Concepts in Electrical Engineering Series, Circuits and Networks: Analysis and Synthesis designed as a textbook for an introductory circuits course at the intermediate undergraduate level. The book may also be appealing to a non-major survey course in electrical engineering course as well. A primary goal in Circuits and Networks is to establish a firm understanding of the basic laws of electrical circuits, and to provide students with a working knowledge of the commonly used methods of analysis in electrical engineering. This is a concise, less expensive alternative. This series is edited by Dick Dorf.

**Circuits and Networks:** Oct 07 2020 Circuits & Networks: Analysis, Design, and Synthesis has been designed for undergraduate students of Electrical, Electronics, Instrumentation, and Control Engineering. The book is structured to provide an in-depth knowledge of electrical circuit analysis, design, and synthesis.

**Electrical Circuit Theory and Technology** Jun 22 2019 Electrical Circuit Theory and Technology is a fully comprehensive text for courses in electrical and electronic principles, circuit theory and electrical technology. The coverage takes students from the fundamentals of the subject, to the completion of a first year degree level course. Thus, this book is ideal for students studying engineering for the first time, and is also suitable for pre-degree vocational courses, especially where progression to higher levels of study is likely. John Bird's approach, based on 700 worked examples supported by over 1000 problems (including answers), is ideal for students of a wide range of abilities, and can be worked through at the student's own pace. Theory is kept to a minimum, placing a firm emphasis on problem-solving skills, and making this a thoroughly practical introduction to these core subjects in the electrical and electronic engineering curriculum. This revised edition includes new material on transients and laplace transforms, with the content carefully matched to typical undergraduate modules. Free Tutor Support Material including full worked solutions to the assessment papers featured in the book will be available at <http://textbooks.elsevier.com/>. Material is only available to lecturers who have adopted the text as an essential purchase. In order to obtain your password to access the material please follow the guidelines in the book.

Digital Circuits And Design, 3E Feb 08 2021 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

Low-Power VLSI Circuits and Systems Aug 24 2019 The book provides a comprehensive coverage of different aspects of low power circuit synthesis at various levels of design hierarchy; starting from the layout level to the system level. For a seamless understanding of the subject, basics of MOS circuits has been introduced at transistor, gate and circuit level; followed by various low-power design methodologies, such as supply voltage scaling, switched capacitance minimization techniques and leakage power minimization approaches. The content of this book will prove useful to students, researchers, as well as practicing engineers.

**Switchgear & Protection** Apr 12 2021 The knowledge of switchgear and apparatus protection plays an important role in the power system. The book is structured to cover the key aspects of the course Switchgear & Protection for undergraduate students. The book starts with the discussion of basics of protective relaying. The book includes comprehensive coverage of faults and analysis of symmetrical and unsymmetrical faults. The book explains the protection against overvoltage, lightning arresters and power system earthing. The book covers the characteristics of various types of relays such as electromagnetic relays, induction type relays, directional relays, differential relays, thermal relays, frequency relays and negative sequence relays. The detailed discussion of distance relays and static relays is also included in the book. The book also covers the various possible faults and methods of protection of transformers, generators, motors, busbars and transmission lines. The book further explains the theory of circuit interruption and various arc interruption methods. Finally, the book incorporates various types of circuit breakers, circuit breaker ratings and testing of circuit breakers. The book uses plain and 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 and self-explanatory diagrams. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

PULSE AND DIGITAL CIRCUITS Jan 22 2022 The second edition of this well-received text continues to provide a coherent and comprehensive coverage of Pulse and Digital Circuits, suitable as a textbook for use by undergraduate students pursuing courses in Electrical and Electronics Engineering, Electronics and Communication Engineering, Electronics and Instrumentation Engineering, and Telecommunication Engineering. It presents clear explanations of the operation and analysis of semiconductor pulse circuits. Practical pulse circuit design methods are investigated in detail. The book provides numerous fully worked-out, laboratory-tested examples to give students a solid grounding in the related design concepts. It includes a number of classroom-tested problems to encourage students to apply theory in a logical fashion. Review questions, fill in the blanks, and multiple choice questions offer the students the opportunity to test their understanding of the text material. This text will be also appropriate for self-study by AMIE and IETE students. NEW TO THIS EDITION : • Includes two new chapters—Logic Gates and Logic Families—to meet the curriculum requirements. • Provides short questions with answers at the end of each chapter. • Presents several new illustrations, examples and exercises

**Linear Circuit Analysis** Mar 12 2021 The combined three volumes of these texts cover traditional linear circuit analysis topics - both concepts and computation - including the use of available software for problem solution where necessary. The text balances emphasis on concepts and calculation so students learn the basic principles and properties that govern circuits behaviour, while they gain a firm understanding of how to solve computational techniques they will face in the world of professional engineers.

**Managerial Economics And Financial Analysis** Jul 04 2020 The Present Book Is Not The Revised Version, A Patch Work Of The Old Book. It Is Originally Designed To Meet The Specific Needs Of The New Syllabus Of Jntu For The Students Of B.Tech. In Other Words It Is The Spontaneous Overflow Of Authors Experience With The Syllabus. Generating And Developing Scientific And Logical Approach Towards The Subject, Taking Into Consideration The Level Of Learners. \* Discussing The Subject Matter Adequately, Comprehensively And Thoroughly. \* Discussing Very Large Number Of Illustrations Concerning Practical Problems In Economics, Accountancy And Financial Analysis. Sufficient Diagrams, Graphs And Flow Charts Are Given To Substantiate The Subject Matter. \* Summarising Every Lesson Under The Heading Summarised View Of The Lesson, So That Learners Could Make A Revision At A Glance. \* Classifying Assignments As Multiple Choice Questions For On Line Examination, Evaluation At A Glance And Self Assessment Questions. \* Mentioning Questions From Previous Managerial Economics And Principles Of Accountancy (Mepa) And Current Managerial Economics And Financial Analysis.

Analog Circuit Design Dec 21 2021 Analog Circuit Design

Engineering Circuit Analysis May 02 2020

*Electronic Devices and Integrated Circuits* Aug 05 2020

Schaum's Outline of Theory and Problems of Electric Circuits Nov 19 2021 Textbook for a first course in circuit analysis

*Electronic Circuit Analysis: Aug 29 2022* Electronic Circuit Analysis is designed to serve students of a two semester undergraduate course on electronic circuit analysis. It builds on the subject from its basic principles over fifteen chapters, providing detailed coverage on the design and analysis of electronic circuits.

**Networks, Lines and Fields** Feb 29 2020

*Power Electronics* Feb 20 2022 This fully updated textbook provides complete coverage of electrical circuits and introduces students to the field of energy conversion technologies, analysis and design. Chapters are designed to equip students with necessary background material in such topics as devices, switching circuit analysis techniques, converter types, and methods of conversion. The book contains a large number of examples, exercises, and problems to help enforce the material presented in each chapter. A detailed discussion of resonant and softswitching dc-to-dc converters is included along with the addition of new chapters covering digital control, non-linear control, and micro-inverters for power electronics applications. Designed for senior undergraduate and graduate electrical engineering students, this book provides students with the ability to analyze and design power electronic circuits used in various industrial applications.

**Networks and Systems** Apr 24 2022 This book allows students to learn fundamental concepts in linear circuit analysis using a well-developed methodology that has been carefully refined through classroom use. Applying his many years of teaching experience, the author focuses the reader's attention on basic circuit concepts and modern analysis methods. The text includes detailed coverage of basics of different terminologies used in electric circuits, mesh and node equations, network analysis and network theorems, signals and its properties, graph theory and its application in circuit analysis, analogous systems, Fourier and Laplace transforms and their applications in circuit theory. Wide coverage of evolution integral, two-port networks, passive and active filters, state variable formulation of network problems and network synthesis have been made. Transient response and frequency domain analysis of network systems has also been discussed. The hall-mark feature of this text is that it helps the reader to gain a sound understanding on the basics of circuit theory. CONTENTS: Basic Circuit Elements and Waveforms Signals and Systems Mesh and Node Analysis Fourier Series Laplace Transform Applications of Laplace Transform Analogous Systems Graph Theory and Network Equation Network Theorems Resonance Attenuators Two-port Network Passive Filters Active Filter Fundamentals State Variable Analysis Network Functions Network Synthesis Feedback System Frequency Response Plots Discrete Systems.

**Analog and Digital Circuits for Electronic Control System Applications** May 14 2021 Today's control system designers face an ever-increasing "need for speed and accuracy in their system measurements and computations. New design approaches using microcontrollers and DSP are emerging, and designers must understand these new approaches, the tools available, and how best to apply them. This practical text covers the latest techniques in microcontroller-based control system design, making use of the popular MSP430 microcontroller from Texas Instruments. The book covers all the circuits of the system, including: • Sensors and their output signals • Design and application of signal conditioning circuits • A-to-D and D-to-A circuit design • Operation and application of the powerful and popular TI MSP430 microcontroller • Data transmission circuits • System power control circuitry Written by an experienced microcontroller engineer and textbook author, the book is lavishly illustrated and includes numerous specific circuit design examples, including a fully tested and documented hands-on project using the MSP430

that makes use of the principles described. For students, engineers, technicians, and hobbyists, this practical text provides the answers you need to design modern control systems quickly and easily. Seasoned Texas Instruments designer provides a ground-up perspective on embedded control systems. Pedagogical style provides a self-learning approach with examples, quizzes and review features.

**NETWORK THEORY** Oct 26 2019 This book offers an excellent and practically oriented introduction to the basic concepts of modern circuit theory. It builds a thorough and rigorous understanding of the analysis techniques of electric networks, and also explains the essential procedures involved in the synthesis of passive networks. Written specifically to meet the needs of undergraduate students of electrical and electronics engineering, electronics and communication engineering, instrumentation and control engineering, and computer science and engineering, the book provides modularized coverage of the full spectrum of network theory suitable for a one-semester course. A balanced emphasis on conceptual understanding and problem-solving helps students master the basic principles and properties that govern circuit behaviour. A large number of solved examples show students the step-by-step processes for applying the techniques presented in the text. A variety of exercises with answers at the chapter ends allow students to practice the solution methods. Besides students pursuing courses in engineering, the book is also suitable for self-study by those preparing for AMIE and competitive examinations. An objective-type question bank at the end of book is designed to see how well the students have mastered the material presented in the text.

**Building Construction Handbook** Dec 29 2019 Ideal for students on all construction courses. Topics presented concisely in plain language and with clear drawings. Updated to include revisions to Building and Construction regulations. The Building Construction Handbook is THE authoritative reference for all construction students and professionals. Its detailed drawings clearly illustrate the construction of building elements, and have been an invaluable guide for builders since 1988. The principles and processes of construction are explained with the concepts of design included where appropriate. Extensive coverage of building construction practice, techniques, and regulations representing both traditional procedures and modern developments are included to provide the most comprehensive and easy to understand guide to building construction. This new edition has been updated to reflect recent changes to the building regulations, as well as new material on the latest technologies used in domestic construction. Building Construction Handbook is the essential, easy-to-use resource for undergraduate and vocational students on a wide range of courses including NVQ and BTEC National, through to Higher National Certificate and Diploma, to Foundation and three-year Degree level. It is also a useful practical reference for building designers, contractors and others engaged in the construction industry.

**SWITCHING THEORY AND LOGIC DESIGN** Jun 02 2020 This comprehensive text on switching theory and logic design is designed for the undergraduate students of electronics and communication engineering, electrical and electronics engineering, electronics and instrumentation engineering, telecommunication engineering, computer science and engineering, and information technology. It will also be useful to AMIE, IETE and diploma students. Written in a student-friendly style, this book, now in its Second Edition, provides an in-depth knowledge of switching theory and the design techniques of digital circuits. Striking a balance between theory and practice, it covers topics ranging from number systems, binary codes, logic gates and Boolean algebra to minimization using K-maps and tabular method, design of combinational logic circuits, synchronous and asynchronous sequential circuits, and algorithmic state machines. The book discusses threshold gates and programmable logic devices (PLDs). In addition, it elaborates on flip-flops and shift registers. Each chapter includes several fully worked-out examples so that the students get a thorough grounding in related design concepts. Short questions with answers, review questions, fill in the blanks, multiple choice questions and problems are provided at the end of each chapter. These help the students test their level of understanding of the subject and prepare for examinations confidently. **NEW TO THIS EDITION** • VHDL programs at the end of each chapter • Complete answers with figures • Several new problems with answers