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KEY=UNIVERSITY - KIRSTEN EMMALEE

Building Multichannel Applications with WebSphere Commerce

IBM Redbooks This IBM® Redbooks® publication discusses the value proposition of cross-channel solutions and describes the IBM Retail Integration Framework Commerce Product Strategy solution and service-oriented architecture (SOA) as an enabler. In depth, this book describes cross-channel processes and cross-channel features and proposes scenarios and configurations to meet the challenges in a competitive environment. This book describes the latest features and techniques of IBM WebSphere® Commerce Version 7. In it, we present an overview of the WebSphere Commerce order and inventory management systems, the distributed order management (referred to as DOM throughout this book) integration framework, and a sample DOM integration scenario. We discuss the Madisons starter store (Web 2.0 storefront) and present a hands-on experience that integrates MapQuest with the WebSphere Commerce V7 Store Locator feature. We discuss how a merchant can use the mobile features that are included in WebSphere Commerce V7 to define e-Marketing Spots and promotion for mobile users. In addition, we demonstrate how to use Google Maps with the Store Locator feature on a mobile device. We include in this book an example about how to apply WebSphere Commerce features on a cross-channel solution as applied at the Easy Hogary Construcccion home improvement retail company in South America. The scenario explains how to scale from an SOA store to a cross-channel business model. This book is designed for use by WebSphere Commerce developers, practitioners, and solution architects in various industries.

Theory of Machines and Mechanisms - II

Nirali Prakashan

Savitribai Phule Pune University Ph.D. Entrance Test: Commerce Subject Ebook-PDF

Objective Questions On Commerce Subject From Various Similar Exams With Answers

Chandresh Agrawal SGN.The Ebook Savitribai Phule Pune University Ph.D. Entrance Test: Commerce Subject Covers Objective Questions On Commerce Subject From Various Similar Exams With Answers.

Theory of Machines and Mechanisms I.

Nirali Prakashan

Applied Mathematics-III (AU,UP)

Firewall Media

ICCS21

21ST INTERNATIONAL CONFERENCE ON COMPOSITE STRUCTURES

Società Editrice Esculapio It is well-known that the topic of composite materials affects many engineering fields, such as civil, mechanical, aerospace, automotive and chemical. In the last decades, in fact, a huge number of scientific papers concerning these peculiar constituents has been published. Analogously, the industrial progress has been extremely noticeable. The study of composite materials, in general, is a challenging activity since the advancements both in the academia and in the industry provide continually new sparks to develop innovative ideas and applications. The communication, the sharing and the exchange of views can surely help the works of many researchers. This aspect represents the main purpose of this Conference, which aims to collect high-level contributions on the development and the application of composite materials. The establishment of this 21st edition of International Conference on Composite Structures has appeared appropriate to continue what has been begun during the previous editions. ICCS wants to be an occasion for many researchers from each part of the globe to meet and discuss about the recent advancements regarding the use of composite structures, sandwich panels, nanotechnology, bio-composites, delamination and fracture, experimental methods, manufacturing and other countless topics that have filled many sessions during this conference. As a proof of this event, which has taken place in Bologna (Italy), selected plenary and key-note lectures have been collected in the present book.

Proceeding of International Conference on Computational Science and Applications

ICCSA 2019

Springer Nature The book consists of high-quality papers presented at the International Conference on Computational Science and Applications (ICCSA 2019), held at Maharashtra Institute of Technology World Peace University, Pune, India, from 7 to 9 August 2019. It covers the latest innovations and developments in information and communication technology, discussing topics such as soft computing and intelligent systems, web of sensor networks, drone operating systems, web of sensor networks, wearable smart sensors, automated guided vehicles and many more.

Innovation in Electrical Power Engineering, Communication, and Computing Technology

Proceedings of Second IEPCCT 2021

Springer Nature This book features selected high-quality papers from the Second International Conference on Innovation in Electrical Power Engineering, Communication, and Computing Technology (IEPCCT 2021), held at Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, India, on 24–26 September 2021. Presenting innovations in power, communication, and computing, it covers topics such as mini, micro, smart and future power grids; power system economics; energy storage systems; intelligent control; power converters; improving power quality; signal processing; sensors and actuators; image/video processing; high-performance data mining algorithms; advances in deep learning; and optimization methods.

Theory of Computation Simplified

Simulate Real-world Computing Machines and Problems with Strong Principles of Computation (English Edition)

BPB Publications A theory behind computing machines KEY FEATURES ● Algorithmic ideas are made simple to understand through the use of examples. ● Contains a wide range of examples and solutions to help students better grasp the concepts. ● Designed to assist and coach students in applying the fundamentals of computation theory in real-world situations. DESCRIPTION The book is geared toward those who thirst for computation theory knowledge. To cater to the demands of a wide range of people, the principles in this book are explained in a way that is easy to understand, digest and apply in the upcoming career. The 'Theory of Computation' is the foundational and mathematical topic in computer science, computer applications, computer Engineering, and software engineering. This book provides a clear introduction to the fundamental principles, followed by an in-depth mathematical study and a wealth of solved problems. Before reading this book, learners must understand basic sets, functions, trees, graphs and strings. The book as a whole acquaints the reader with automata theory fundamentals. The book provides simplified theoretical coverage of the essential principles, solve instances, and solve multiple-choice problems with solutions. The theory and computation of automata presented in this book will greatly assist students and professors alike. WHAT YOU WILL LEARN ● Create finite automata that aren't predictable. ● Create regular expressions in any language. ● Convert context-free grammar to Chomsky and Greibach's normal forms. ● Build deterministic and non-deterministic pushdown automata for the regular expression. ● Know the difference between decidability and computability. ● Create a Turing machine based on a specified regular expression. WHO THIS BOOK IS FOR This book is suitable for undergraduate and graduate students in computer science, information technology and software engineering with a basic understanding of set theory and boolean logic. TABLE OF CONTENTS 1. Finite Automata 2. Non-Deterministic Finite Automata 3. Regular Expressions 4. Context Free Grammar 5. Regular Language 6. Push Down Automata 7. Post Machines 8. Turing Machines 9. Computability and Undecidability 10. Complexity Theory: Advanced Perspective

Electrolytes: Advances in Research and Application: 2011 Edition

ScholarlyEditions Electrolytes: Advances in Research and Application: 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Electrolytes. The editors have built Electrolytes: Advances in Research and Application: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Electrolytes in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Electrolytes: Advances in Research and Application: 2011 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

Machine Learning Approaches for Urban Computing

Springer Nature This book discusses various machine learning applications and models, developed using heterogeneous data, which helps in a comprehensive prediction, optimization, association analysis, cluster analysis and classification-related applications for various activities in urban area. It details multiple types of data generating from urban activities and suitability of various machine learning algorithms for handling urban data. The book is helpful for researchers, academicians, faculties, scientists and geospatial industry professionals for their research work and sets new ideas in the field of urban computing.

Proceedings of the 2nd International Conference on Data Engineering and Communication Technology

ICDECT 2017

Springer This book features research work presented at the 2nd International Conference on Data Engineering and Communication Technology (ICDECT) held on December 15–16, 2017 at Symbiosis International University, Pune, Maharashtra, India. It discusses advanced, multi-disciplinary research into smart computing, information systems and electronic systems, focusing on innovation paradigms in system knowledge, intelligence and sustainability that can be applied to provide feasible solutions to varied problems in society, the environment and industry. It also addresses the deployment of emerging computational and knowledge transfer approaches, optimizing solutions in a variety of disciplines of computer science and electronics engineering.

Engineering Chemistry Made Easy

Made Easy Series is developed with an objective of meeting the requirement of books that cover syllabi of important core engineering subjects focussing completely on the manner in which concepts will be tested in examinations. Books in this series are designed in a question-and-answer format to cater to undergraduate students of all major technological universities and to equip them with the desired knowledge in a simple yet comprehensive manner. They explore all the important concepts of the syllabi with the help of solved questions and numerical problems of previous years' question papers of these universities. Apart from being extremely student-friendly and lucid, the books in this series are rich in pedagogical features such as brief point-wise discussion of fundamental concepts, theoretical questions with answers, solved numerical problems, and objective questions and exercises for further practice (all taken from previous years' question papers) that aid students in preparing well for university examinations. Because of the fiercely competitive nature of the current academic scenario and the large number of books available for each topic, it is extremely difficult for students to spend too much time in an in-depth study of each book, especially during examinations when they are hard-pressed for time. Made Easy Series will empower students to prepare for university examinations in a systematic and thorough manner in a limited amount of time. The syllabi of the following universities have been covered in the book: UPTU, Anna Univ., JNTU, VTU, RTU, RGTU, WBUT, BPUT, PTU, Pune Univ., Mumbai Univ.

Modern Control Theory

Technical Publications The book is written for an undergraduate course on the Modern Control Systems. It provides comprehensive explanation of state variable analysis of linear control systems and analysis of nonlinear control systems. Each chapter starts with the background of the topic. Then it gives the conceptual knowledge about the topic dividing it in various sections and subsections. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting. The book starts with explaining the concept of state variable and state model of linear control systems. Then it explains how to obtain the state models of various types of systems using phase variables, canonical variables, Jordan's canonical form and

cascade programming. Then the book includes good coverage of the matrix algebra including eigen values, eigen vectors, modal matrix and diagonalization. It also includes the derivation of transfer function of the system from its state model. The book further explains the solution of state equations including the concept of state transition matrix. It also includes the various methods of obtaining the state transition matrix such as Laplace transform method, Power series method, Cayley Hamilton method and Similarity transformation method. It further includes the detailed discussion of controllability and observability of systems. It also provides the discussion of pole placement technique of system design. The book teaches various types of nonlinearities and the nonlinear systems. The book covers the fundamental knowledge of analysis of nonlinear systems using phase plane method, isocline method and delta method. Finally, it explains stability analysis of nonlinear systems and Liapunov's stability analysis.

Control System Engineering

Technical Publications The book is written for an undergraduate course on the Feedback Control Systems. It provides comprehensive explanation of theory and practice of control system engineering. It elaborates various aspects of time domain and frequency domain analysis and design of control systems. Each chapter starts with the background of the topic. Then it gives the conceptual knowledge about the topic dividing it in various sections and subsections. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The explanations are given using very simple and lucid language. All the chapters are arranged in a specific sequence which helps to build the understanding of the subject in a logical fashion. The book starts with explaining the various types of control systems. Then it explains how to obtain the mathematical models of various types of systems such as electrical, mechanical, thermal and liquid level systems. Then the book includes good coverage of the block diagram and signal flow graph methods of representing the various systems and the reduction methods to obtain simple system from the analysis point of view. The book further illustrates the steady state and transient analysis of control systems. The book covers the fundamental knowledge of controllers used in practice to optimize the performance of the systems. The book emphasizes the detailed analysis of second order systems as these systems are common in practice and higher order systems can be approximated as second order systems. The book teaches the concept of stability and time domain stability analysis using Routh-Hurwitz method and root locus method. It further explains the fundamentals of frequency domain analysis of the systems including co-relation between time domain and frequency domain. The book gives very simple techniques for stability analysis of the systems in the frequency domain, using Bode plot, Polar plot and Nyquist plot methods. It also explores the concepts of compensation and design of the control systems in time domain and frequency domain. The classical approach loses the importance of initial conditions in the systems. Thus, the book provides the detailed explanation of modern approach of analysis which is the state variable analysis of the systems including methods of finding the state transition matrix, solution of state equation and the concepts of controllability and observability. The variety of solved examples is the feature of this book which helps to inculcate the knowledge of the design and analysis of the control systems 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.

Electrical Circuit Analysis

Technical Publications The importance of Electrical Circuit Analysis is well known in the various engineering fields. The book provides comprehensive coverage of mesh and node analysis, various network theorems, analysis of first and second order networks using time and Laplace domain, steady state analysis of a.c. circuits, coupled circuits and dot conventions, network functions, resonance and two port network parameters. The book starts with explaining the network simplification techniques including mesh analysis, node analysis and source shifting. Then the book explains the various network theorems and concept of duality. The book also covers the solution of first and second order networks in time domain. The sinusoidal steady state analysis of electrical circuits is also explained in the book. The book incorporates the discussion of coupled circuits and dot conventions. The Laplace transform plays an important role in the network analysis. The chapter on Laplace transform includes properties of Laplace transform and its application in the network analysis. The book includes the discussion of network functions of one and two port networks. The book incorporates the detailed discussion of resonant circuits. The book covers the various aspects of two port network parameters along with the conditions of symmetry and reciprocity. It also derives the interrelationships between the two port network parameters. The book uses plain and lucid language to explain each topic. Each chapter gives the conceptual knowledge about the topic dividing it in various sections and subsections. The book provides the logical method of explaining the various complicated topics and stepwise methods to make the understanding easy. The variety of solved examples is the feature of this book. The book explains the philosophy of the subject which makes the understanding of the subject very clear and makes the subject more interesting.

Green Sustainable Process for Chemical and Environmental Engineering and Science

Solid State Synthetic Methods

Elsevier Green Sustainable Process for Chemical and Environmental Engineering and Science: Solid State Synthetic Methods cover recent advances made in the field of solid-state materials synthesis and its various applications. The book provides a brief introduction to the topic and the fundamental principles governing the various methods. Sustainable techniques and green processes development in solid-state chemistry are also highlighted. This book also provides a comprehensive literature on the industrial application using solid-state materials and solid-state devices. Overall, this book is intended to explore green solid-state techniques, eco-friendly materials involved in organic synthesis and real-time applications. Provides a broad overview of solid-state chemistry Outlines an eco-friendly solid-state synthesis of modern nanomaterials, organometallic, coordination compounds and pure organic Gives a detailed account of solid-state chemistry, fundamentals, concepts, techniques and applications Deliberates cutting-edge recent advances in industrial technologies involved in energy, environmental, medicinal and organic chemistry fields

The Bioinformatics Times

Allied Publishers

Issues in Artificial Intelligence, Robotics and Machine Learning: 2011 Edition

ScholarlyEditions Issues in Artificial Intelligence, Robotics and Machine Learning: 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Artificial Intelligence, Robotics and Machine Learning. The editors have built Issues in Artificial Intelligence, Robotics and Machine Learning: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Artificial Intelligence, Robotics and Machine Learning in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Artificial Intelligence, Robotics and Machine Learning: 2011 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

Cybernetics Approaches in Intelligent Systems

Computational Methods in Systems and Software 2017, vol. 1

Springer This book discusses new approaches and methods in the cybernetics, algorithms and software engineering in the scope of the intelligent systems. It brings new approaches and methods to real-world problems and exploratory research that describes novel approaches in the cybernetics, algorithms and software engineering in the scope of the intelligent systems. This book constitutes the refereed proceedings of the Computational Methods in Systems and Software 2017, a conference that provided an international forum for the discussion of the latest high-quality research results in all areas related to computational methods, statistics, cybernetics and software engineering.

Electromagnetic Field Theory

Technical Publications The comprehensive study of electric, magnetic and combined fields is nothing but electromagnetic engineering. Along with electronics, electromagnetics plays an important role in other branches. The book is structured to cover the key aspects of the course Electromagnetic Field Theory for undergraduate students. The knowledge of vector analysis is the base of electromagnetic engineering. Hence book starts with the discussion of vector analysis. Then it introduces the basic concepts of electrostatics such as Coulomb's law, electric field intensity due to various charge distributions, electric flux, electric flux density, Gauss's law, divergence and divergence theorem. The book continues to explain the concept of elementary work done, conservative property, electric potential and potential difference and the energy in the electrostatic fields. The detailed discussion of current density, continuity equation, boundary conditions and various types of capacitors is also included in the book. The book provides the discussion of Poisson's and Laplace's equations and their use in variety of practical applications. The chapter on magnetostatics incorporates the explanation of Biot-Savart's law, Ampere's circuital law and its applications, concept of curl, Stoke's theorem, scalar and vector magnetic potentials. The book also includes the concept of force on a moving charge, force on differential current element and magnetic boundary conditions. The book covers all the details of Faraday's laws, time varying fields, Maxwell's equations and Poynting theorem. Finally, the book provides the detailed study of uniform plane waves including their propagation in free space, perfect dielectrics, lossy dielectrics and good conductors. 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. The variety of solved examples is the feature of this book which helps to inculcate the knowledge of the electromagnetics in the students. 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.

Control System Theory

Technical Publications The book is written for an undergraduate course on the theory of Feedback Control Systems. It provides comprehensive explanation of theory and practice of control system engineering. It elaborates various aspects of time domain and frequency domain analysis and design of control systems. Each chapter starts with the background of the topic. Then it gives the conceptual knowledge about the topic dividing it in various sections and subsections. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The explanations are given using very simple and lucid language. All the chapters are arranged in a specific sequence which helps to build the understanding of the subject in a logical fashion. The book starts with explaining the various types of control systems. Then it explains how to obtain the mathematical models of various types of systems such as electrical, mechanical, thermal and liquid level systems. Then the book includes good coverage of the block diagram and signal flow graph methods of representing the various systems and the reduction methods to obtain simple system from the analysis point of view. The book further illustrates the steady state and transient analysis of control systems. The book covers the fundamental knowledge of controllers used in practice to optimize the performance of the systems. The book emphasizes the detailed analysis of second order systems as these systems are common in practice and higher order systems can be approximated as second order systems. The book teaches the concept of stability and time domain stability analysis using Routh-Hurwitz method and root locus method. It further explains the fundamentals of frequency domain analysis of the systems including co-relation between time domain and frequency domain. The book gives very simple techniques for stability analysis of the systems in the frequency domain, using Bode plot, Polar plot and Nyquist plot methods. It also explores the concepts of compensation and design of the control systems in time domain and frequency domain. The classical approach loses the importance of initial conditions in the systems. Thus the book provides the detailed explanation of modern approach of analysis which is the state variable analysis of the systems including methods of finding the state transition matrix, solution of state equation and the concepts of controllability and observability. The book also introduces the concept of discrete time systems including digital and sample data systems, z-transform, difference equations, state space representation, pulse transfer functions and stability of linear discrete time systems. The variety of solved examples is the feature of this book which helps to inculcate the knowledge of the design and analysis of the control systems 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.

ICCCE 2021

Proceedings of the 4th International Conference on Communications and Cyber Physical Engineering

Springer Nature This book is a collection of research articles presented at the 4th International Conference on Communications and Cyber-Physical Engineering (ICCCE 2021), held on April 9 and 10, 2021, at CMR Engineering College, Hyderabad, India. ICCCE is one of the most prestigious conferences conceptualized in the field of networking and communication technology offering in-depth information on the latest developments in voice, data, image, and multimedia. Discussing the latest developments in voice and data communication engineering, cyber-physical systems, network science, communication software, image, and multimedia processing research and applications, as well as communication technologies and other related technologies, it includes contributions from both academia and industry. This book is a valuable resource for scientists, research scholars, and PG students working to formulate their research ideas and find the future directions in these areas. Further, it may serve as a reference work to understand the latest engineering and technologies used by practicing engineers in the field of communication engineering.

Capitalist Nigger

The Road To Success – A Spider Web Doctrine

Jonathan Ball Publishers Capitalist Nigger is an explosive and jarring indictment of the black race. The book asserts that the Negroid race, as naturally endowed as any other, is culpably a non-productive race, a consumer race that depends on other communities for its culture, its language, its feeding and its clothing. Despite enormous natural resources, blacks are economic slaves because they lack the 'devil-may-care' attitude and the 'killer instinct' of the Caucasian, as well as the spider web mentality of the Asian. A Capitalist Nigger must embody ruthlessness in pursuit of excellence in his drive towards achieving the goal of becoming an economic warrior. In putting forward the idea of the Capitalist Nigger, Chika Onyeani charts a road to success whereby black economic warriors employ the 'Spider Web Doctrine' – discipline, self-reliance, ruthlessness – to escape from their victim mentality. Born in Nigeria, Chika Onyeani is a journalist, editor and former diplomat.

Foundations of Data Science

Cambridge University Press This book provides an introduction to the mathematical and algorithmic foundations of data science, including machine learning, high-dimensional geometry, and analysis of large networks. Topics include the counterintuitive nature of data in high dimensions, important linear algebraic techniques such as singular value decomposition, the theory of random walks and Markov chains, the fundamentals of and important algorithms for machine learning, algorithms and analysis for clustering, probabilistic models for large networks, representation learning including topic modelling and non-negative matrix factorization, wavelets and compressed sensing. Important probabilistic techniques are developed including the law of large numbers, tail inequalities, analysis of random projections, generalization guarantees in machine learning, and moment methods for analysis of phase transitions in large random graphs. Additionally, important structural and complexity measures are discussed such as matrix norms and VC-dimension. This book is suitable for both undergraduate and graduate courses in the design and analysis of algorithms for data.

Measurements and Instrumentation

Technical Publications The importance of measuring instruments is well known in the various engineering fields. The book provides comprehensive coverage of various analog, electronic and digital instruments, d.c. and a.c. bridges, signal generators and analyzers, virtual instrumentation and data acquisition system. The book starts with explaining the theory of measurement including characteristics of instruments, classification, standards, statistical analysis and limiting errors. Then the book explains the various analog and electronic instruments such as PMMC, moving iron, electro-dynamometer type, true RMS, Q-meter and sampling voltmeter. The book also includes the discussion of various d.c. and a.c. bridges along with necessary derivations and phasor diagrams. The book incorporates the detailed discussion of various types of oscilloscopes including simple, dual beam, dual trace, analog storage, sampling and digital oscilloscope. It also explains the various oscilloscope measurements and Lissajous figures. The book further explains the various signal generators and analyzers. It also covers the discussion of DAC, ADC, various digital instruments and data acquisition system. Finally the book provides the details of computer controlled systems, virtual instrumentation and fiber optic measurements. Each chapter starts with the background of the topic. Then it gives the conceptual knowledge about the topic dividing it in various sections and subsections.

Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

Vedic Mathematics Made Easy

Jaico Publishing House A Simplified Approach For Beginners& Can you multiply 231072 by 110649 and get the answer in just a single line? Can you find the cube root of 262144 or 704969 in two seconds? Can you predict the birth-date of a person without him telling you? Can you predict how much money a person has without him telling you? Can you check the final answer without solving the question? Or, in a special case, get the final answer without looking at the question? Can you solve squares, square roots, cube-roots and other problems mentally?All this and a lot more is possible with the techniques of Vedic Mathematics described in this book. The techniques are useful for students, professionals and businessmen. The techniques of Vedic Mathematics have helped millions of students all over the world get rid of their fear of numbers and improve their scores in quantitative subjects. Primary and secondary school students have found the Vedic mathematics approach very exciting. Those giving competitive exams like MBA, MCA, CET, UPSC, GRE, GMAT etc. have asserted that Vedic Mathematics has helped them crack the entrance tests of these exams.

Discoveries in Photosynthesis

Springer Science & Business Media "Life Is Bottled Sunshine" [Wynwood Reade, Martyrdom of Man, 1924]. This inspired phrase is a four-word summary of the significance of photosynthesis for life on earth. The study of photosynthesis has attracted the attention of a legion of biologists, biochemists, chemists and physicists for over 200 years. Discoveries in Photosynthesis presents a sweeping overview of the history of photosynthesis investigations, and detailed accounts of research progress in all aspects of the most complex bioenergetic process in living organisms. Conceived of as a way of summarizing the history of research advances in photosynthesis as of millennium 2000, the book evolved into a majestic and encyclopedic saga involving all of the basic sciences. The book contains 111 papers, authored by 132 scientists from 19 countries. It includes overviews; timelines; tributes; minireviews on excitation energy transfer, reaction centers, oxygen evolution, light-harvesting and pigment-protein complexes, electron transport and ATP synthesis, techniques and applications, biogenesis and membrane architecture, reductive and assimilatory processes, transport, regulation and adaptation, Genetics, and Evolution; laboratories and national perspectives; and retrospectives that end in a list of photosynthesis symposia, books and conferences. Informal and formal photographs of scientists make it a wonderful book to have. This book is meant not only for the researchers and graduate students, but also for advanced undergraduates in Plant Biology, Microbiology, Cell Biology, Biochemistry, Biophysics and History of Science.

Emerging Technologies in Data Mining and Information Security

Proceedings of IEMIS 2020, Volume 2

Springer Nature This book features research papers presented at the International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2020) held at the University of Engineering & Management, Kolkata, India, during July 2020. The book is organized in three volumes and includes high-quality research work by academicians and industrial experts in the field of computing and communication, including full-length papers, research-in-progress papers and case studies related to all the areas of data mining, machine learning, Internet of things (IoT) and information security.

Basic Electrical Engineering

Technical Publications 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 Kirchoff'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.

Basic Electrical Engineering Made Easy

Made Easy Series is developed with an objective of meeting the requirement of books that cover syllabi of important core engineering subjects focussing completely on the manner in which concepts will be tested in examinations. Books in this series are designed in a question-and-answer format to cater to undergraduate students of all major technological universities and to equip them with the desired knowledge in a simple yet comprehensive manner. They explore all the important concepts of the syllabi with the help of solved questions and numerical problems of previous years? question papers of these universities. Apart from being extremely student-friendly and lucid, the books in this series are rich in pedagogical features such as brief point-wise discussion of fundamental concepts, theoretical questions with answers, solved numerical problems, and objective questions and exercises for further practice (all taken from previous years? question papers) that aid students in preparing well for university examinations. Because of the fiercely competitive nature of the current academic scenario and the large number of books available for each topic, it is extremely difficult for students to spend too much time in an in-depth study of each book, especially during examinations when they are hard-pressed for time. Made Easy Series will empower students to prepare for university examinations in a systematic and thorough manner in a limited amount of time. The syllabi of the following universities have been covered in the book: UPTU, Anna Univ., JNTU, VTU, RTU, RGTU, WBUT, BPUT, PTU, Pune Univ., Mumbai Univ.

Radical Realities

Writers Pouch Radical Realities is an anthology of three short stories by three writers namely Krishna Phani Sharman, Manognya Bethapudi, & P. C. Ravuri. The selected stories have been chosen based on their realistic narratives where characters are taken through radical and unpredictable storylines while dealing with the theme of family.

Transmission and Distribution

Technical Publications The book covers all the aspects of Transmission and Distribution for undergraduate course. The various aspects of transmission and distribution systems, FACTS, sag calculations, parameters and performance of transmission lines, insulators, cables, substations and grounding systems are explained in the book with the help of comprehensive approach. The book starts with the discussion of basics of power system. It includes comparison of material required for overhead and underground systems. Various types of d.c. and a.c. distribution systems, EHVAC, HVDC and FACTS devices is also included in the book. The book explains the sag calculation under different conditions and sag template. In depth analysis of transmission line parameters is also included in the book. The book also covers the performance analysis of short, medium and long transmission lines along with circle diagram and methods of voltage control. The details of corona effect are explained in support. The book incorporates the discussion of types of insulators, string efficiency, methods of improving string efficiency, single and three core cables, grading of cables, heating and testing of cables. The chapter on substations includes the explanation of various types of substations, substation equipment's and key diagrams. The book also covers the various types of grounding systems, grounding grids and resistance of grounding systems. 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, self-explanatory diagrams and large number of solved problems. The book explains the philosophy of

the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

Computational Intelligence in Manufacturing

Woodhead Publishing Computational Intelligence in Manufacturing addresses applications of AI, machine learning and other innovative computational techniques across the manufacturing supply chain. The rapid development of smart or digital manufacturing known as Industry 4.0 has swiftly provided a large number of opportunities for product and manufacturing process improvement. Selecting the appropriate technologies and combining them successfully is a challenge this book helps readers overcome. It explains how to prepare different manufacturing cells for flexibility and enhanced productivity with better supply chain management, e.g., calibrating design machine tools for automation and agility. Computational intelligence applications for non-conventional manufacturing processes such as ECM and EDM are covered alongside recent advances in traditional processes like casting, welding and metal forming. As well as describing specific applications, this practical guide also explains the computational intelligence paradigm for enhanced supply chain management. Includes hot topics such as augmented and virtual reality applications in manufacturing Provides details of computational techniques, such as nature inspired algorithms for manufacturing process modeling Gives practical technical advice on how to calibrate processes and tools to work efficiently in an industry 4.0 system

Fractional Calculus

ALPHA SCIENCE INTERNATIONAL LIMITED FRACTIONAL CALCULUS: Theory and Applications deals with differentiation and integration of arbitrary order. The origin of this subject can be traced back to the end of seventeenth century, the time when Newton and Leibniz developed foundations of differential and integral calculus. Nonetheless, utility and applicability of FC to various branches of science and engineering have been realized only in last few decades. Recent years have witnessed tremendous upsurge in research activities related to the applications of FC in modeling of real-world systems. Unlike the derivatives of integral order, the non-local nature of fractional derivatives correctly models many natural phenomena containing long memory and give more accurate description than their integer counterparts. The present book comprises of contributions from academicians and leading researchers and gives a panoramic overview of various aspects of this subject: Introduction to Fractional Calculus Fractional Differential Equations Fractional Ordered Dynamical Systems Fractional Operators on Fractals Local Fractional Derivatives Fractional Control Systems Fractional Operators and Statistical Distributions Applications to Engineering

Network Analysis & Synthesis

Technical Publications The importance of network analysis and synthesis is well known in the various engineering fields. The book provides comprehensive coverage of the signals and network analysis, network functions and two port networks, network synthesis and active filter design. The book is structured to cover the key aspects of the course Network Analysis & Synthesis. The book starts with explaining the various types of signals, basic concepts of network analysis and transient analysis using classical approach. The Laplace transform plays an important role in the network analysis. The chapter on Laplace transform includes properties of Laplace transform and its application in the network analysis. The book includes the discussion of network functions of one and two port networks. The book covers the various aspects of two port network parameters along with the conditions of symmetry and reciprocity. It also derives the interrelationships between the two port network parameters. The network synthesis starts with the realizability theory including Hurwitz polynomial, properties of positive real functions, Sturm's theorem and maximum modulus theorem. The book covers the various aspects of one port network synthesis explaining the network synthesis of LC, RC, RL and RLC networks using Foster and Cauer forms. Then it explains the elements of transfer function synthesis. Finally, the book illustrates the active filter design. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The explanations are given using very simple and lucid language. All the chapters are arranged in a specific sequence which helps to build the understanding of the subject in a logical fashion. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

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

S. Chand Publishing The primary objective of vol. I of A Text Book of Electrical Technology is to provide a comprehensive treatment of topics in Basic Electrical Engineering both for electrical as well as nonelectrical students pursuing their studies in civil, mechanical, mining, textile, chemical, industrial, environmental, aerospace, electronic and computer engineering both at the Degree and diploma level. Based on the suggestions received from our esteemed readers, both from India and abroad, the scope of the book has been 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 colleges and technical institutions in India and abroad.

Inner Engineering

A Yogi's Guide to Joy

Harmony NEW YORK TIMES BESTSELLER - Thought leader, visionary, philanthropist, mystic, and yogi Sadhguru presents Western readers with a time-tested path to achieving absolute well-being: the classical science of yoga. NAMED ONE OF THE TEN BEST BOOKS OF THE YEAR BY SPIRITUALITY & HEALTH The practice of hatha yoga, as we commonly know it, is but one of eight branches of the body of knowledge that is yoga. In fact, yoga is a sophisticated system of self-empowerment that is capable of harnessing and activating inner energies in such a way that your body and mind function at their optimal capacity. It is a means to create inner situations exactly the way you want them, turning you into the architect of your own joy. A yogi lives life in this expansive state, and in this transformative book Sadhguru tells the story of his own awakening, from a boy with an unusual affinity for the natural world to a young daredevil who crossed the Indian continent on his motorcycle. He relates the moment of his enlightenment on a mountaintop in southern India, where time stood still and he emerged radically changed. Today, as the founder of Isha, an organization devoted to humanitarian causes, he lights the path for millions. The term guru, he notes, means "dispeller of darkness, someone who opens the door for you. . . . As a guru, I have no doctrine to teach, no philosophy to impart, no belief to propagate. And that is because the only solution for all the ills that plague humanity is self-transformation. Self-transformation means that nothing of the old remains. It is a dimensional shift in the way you perceive and experience life." The wisdom distilled in this accessible, profound, and engaging book offers readers time-tested tools that are fresh, alive, and radiantly new. Inner Engineering presents a revolutionary way of thinking about our agency and our humanity and the opportunity to achieve nothing less than a life of joy. Praise for Sadhguru and Inner Engineering "Contrarian and consistent, ancient and contemporary, Inner Engineering is a loving invitation to live our best lives and a profound reassurance of why and how we can."--Sir Ken Robinson, author of The Element, Finding Your Element, and Out of Our Minds: Learning to Be Creative "I am inspired by Sadhguru's capacity for joy, his exuberance for life, and the depth and breadth of his curiosity and knowledge. His book is filled with moments of wonder, awe, and intellectual challenge. I highly recommend it for anyone interested in self-transformation."--Mark Hyman, M.D., director, Cleveland Clinic Center for Functional Medicine, and New York Times bestselling author "Inner Engineering is a fascinating read of Sadhguru's insights and his teachings. If you are ready, it is a tool to help awaken your own inner intelligence, the ultimate and supreme genius that mirrors the wisdom of the cosmos."--Deepak Chopra

Electronic Circuits II

Theory, Analysis, and Design

Technical Publications The book covers all the aspects of theory, analysis, and design of Electronic Circuits for the undergraduate course. The concepts of feedback amplifiers and oscillators, tuned amplifiers, wave shaping and multivibrator circuits, power amplifiers, and DC converters are explained in a comprehensive manner. The former part of the book focuses on the fundamental concepts of feedback amplifiers and oscillators. It explains the analysis of series-shunt, series-series, shunt-shunt, and shunt-series feedback amplifiers, stability and frequency compensation in feedback amplifiers. The concepts of the Barkhausen criterion for oscillations and the detailed analysis of various oscillator circuits including phase shift, Wien bridge, Hartley, Colpitt's, Clapp, ring, and crystal oscillators are included in the book. The oscillator amplitude stabilization is explained in support. Then the book focuses on the fundamental concept of tuned amplifiers. It explains topics such as coil losses, unloaded and loaded Q of tank circuits, analysis of single and double tuned amplifiers, the effect of cascading single tuned and double tuned amplifiers on bandwidth, stagger tuned amplifiers, stability of tuned amplifiers, and neutralization methods. The later part of the book incorporates the detailed analysis of various wave shaping circuits, including high pass and low pass RC and RL circuits, clipper and clamper circuits, bistable, monostable, and astable multivibrator circuits. The discussion of Schmitt

trigger circuits and UJT is also included in the book. Finally, the book explains the class A, B, and C types of power amplifiers along with the discussion of the elimination of cross-over distortion. The book also covers the concepts of power amplifiers using power MOSFET and various types of d.c. to d.c. converters. The book uses plain and lucid language to explain each topic. The variety of solved examples is the feature of this book. The book explains the philosophy of the subject, which makes the understanding of the concepts very clear and makes the subject more interesting.

Intelligent Cities and Globalisation of Innovation Networks

Routledge Intelligent Cities and Globalisation of Innovation Networks combines concepts and theories from the fields of urban development and planning, innovation management, and virtual / intelligent environments. It explains the rise of intelligent cities with respect to the globalisation of systems of innovation; opens up a new way for making intelligent environments via the connection of human skills, institutional mechanisms, and digital spaces operating within a community; and describes a series of platforms and tools for the making of intelligent cities.