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Railway Engineering Railway Engineering has been specially designed for undergraduate students of civil engineering. From fundamental topics to modern technological developments, the book covers all aspects of the railways including various modernization plans covering tracks, locomotives, and rolling stock. Important statistical data about the Indian Railways and other useful information have also been incorporated to make the coverage comprehensive. A number of illustrative examples supplement text to aid easy understanding of design methods discussed. The book should also serve the need of students of polytechnics and those appearing of the AMIE examination and would also be a ready reference for railway professionals. Sustainable Innovation Trends in Marketing and Management *Springer Nature* In today's ever-changing global world, there is a permanent need for anticipating new and evolving customer needs, resource supply constraints, and dynamically changing employee expectations. Sustainable innovation applies to products, services, and technologies as well as new business and organization models. This book provides insights into sustainable innovation trends in various marketing- and management-related fields. Authors critically investigate, amongst others, the sustainability impact of disruptive product design and innovative collaboration solutions within buyer-supplier relationships, along with innovative organizational processes to promote sustainable well-being-productivity synergy in a VUCA world. This volume is a uniquely positioned contribution of interrelated research articles on the sustainability-driven innovation needed for organizational health and future viability. Airport Engineering *CHAROTARPUBLISHINGHOUSEP.LTD* Computational Complexity A Modern Approach *Cambridge University Press* New and classical results in computational complexity, including interactive proofs, PCP, derandomization, and quantum computation. Ideal for graduate students. Current Affairs Yearly Review 2021 E-Book - Download Free PDF! Download Current Affairs Yearly Review 2021 E-book For Free Covering Important News in single PDF. *Testbook.com* This Current Affairs Yearly Review 2021 E-Book will help you understand in detail exam-related important news including National & International Affairs, Defence, Sports, Person in News, MoU & Agreements, Science & Tech, Awards & Honours, Books etc. Appointments Current Affairs Yearly Review 2021 E-book PDF Know all appointment & resignation with this Appointments Current Affairs Yearly Review 2021 E-book. *Testbook.com* Make yourself aware of the new appointments and resignations with this Appointments Current Affairs Yearly Review 2021 E-book and check who is the advisor to PM, Chairman of Audit Bureau of Circulations, Chief of IAF, DG of Indian Coast Guard etc. International Conference on Innovative Computing and Communications Proceedings of ICICC 2021, Volume 2 *Springer Nature* This book includes high-quality research papers presented at the Fourth International Conference on Innovative Computing and Communication (ICICC 2021), which is held at the Shaheed Sukhdev College of Business Studies, University of Delhi, Delhi, India, on February 20-21, 2021. Introducing the innovative works of scientists, professors, research scholars, students and industrial experts in the field of computing and communication, the book promotes the transformation of fundamental research into institutional and industrialized research and the conversion of applied exploration into real-time applications. Textbook for MRCOG-1 Basic Sciences in Obstetrics & Gynaecology *Jaypee Brothers Medical Publishers* This new edition of Textbook for MRCOG -1: Basic Sciences in Obstetrics & Gynaecology is a comprehensive resource for candidates preparing for the MRCOG Part 1 exam, and all medical students wishing to pursue specialisation in obstetrics and gynaecology in the UK. The book is divided into seventeen sections, in accordance with the latest exam format and curriculum from the Royal College of Obstetricians and Gynaecologists (RCOG). The second edition has been fully revised and updated and includes two new chapters on data interpretation and image-based questions. Images, flowcharts and tables assist learning and each topic concludes with SBAs (Single Best Answers) to help students prepare for examinations. 1200 SBAs are included throughout the book. Key Points Comprehensive study resource for MRCOG Part 1 exam candidates Fully revised, second edition with new topics included Includes 1200 SBA questions for self-assessment Previous edition (9789385891281) published in 2016 Learning Computer Fundamentals, Ms Office and Internet & Web Tech. *Firewall Media* Autonomy of a State in a Federation A Special Case Study of Jammu and Kashmir *Springer Nature* The book discusses the issue of autonomy in India's federal system and its precision and focused nature. It inquires into the various aspects of the problem autonomy of the states and its emerging trends with special reference of Jammu and Kashmir State autonomy. The book addresses many controversial unanswered question like - Should India adopt and opt for 'dual' or 'competitive' model of federalism, which has long since been discarded even in the land of its origin or should we evolve robust indigenous solutions to our problem of autonomy of States? To change the metaphor, do we choose a 'regression model' or a 'development model' of our federal polity? All these discussions which deserve sustained citizen interest and national debate, have been answered in the present book. International Fragmentation Impacts and Prospects for Manufacturing, Marketing, Economy, and Growth *Springer* This book addresses the increased fragmentation and internationalization of production. It explores how concurrent business transformations in manufacturing and marketing impact global and developing economies, and how supply chain initiatives and information sharing impact overall organizational performance. It further connects marketing and advertising as an important link between organizations and its partners; education as a bridge between developing and developed world economies; and growth as a long-term objective of increasing integration at the regional and global level. Through a series of case studies, scholars across the US and France contribute chapters on the manufacturing, marketing, and internationalization of luxury fashion brands, music advertising, the growth of Amazon, and the business landscapes in India, China, Africa, and North Korea. The book provides academic libraries, international business scholars, graduate students, and policy makers with insights and opportunities that enable firms to achieve a competitive advantage in the marketplace. Industry 4.0 and Advanced Manufacturing Proceedings of I-4AM 2019 *Springer Nature* This book presents selected papers from the 1st International Conference on Industry 4.0 and Advanced Manufacturing held at the Indian Institute of Science, Bangalore and includes deliberations from stakeholders in manufacturing and Industry 4.0 on the nature, needs, challenges, opportunities, problems, and solutions in these transformational areas. Special emphasis is placed on exploring avenues for creating a vision of, and enablers for, sustainable, affordable, and human-centric Industry 4.0. The book showcases cutting edge practice, research, and educational innovation in this crucial and rapidly evolving area. This book will be useful to researchers in academia and industry, and will also be useful to policymakers involved in creating ecosystems for implementation of Industry 4.0. Alchemy of Change Managing Transition through Value-Based Leadership *SAGE Publishing India* Change is inevitable and usually painful. A spoonful of empathic leadership, a smattering of new tools and a few sachets of foundational values boil together to create organizational transformation. However, not all change efforts are successful. Alchemy of Change shows that value-based institutions, which evolve from the wisdom of the soil, can bring about enduring change. Introducing the Indian Model of Change, which is based on Indian values of leadership, dialogue, mutual respect, and goal setting, the authors explain how the nuances and distinctions of the Indian mindset and cultural backdrop can help to keep pace with today's fast-changing world. Through real case studies and references from diverse literature, the book shows that change management cannot be treated as a mechanical exercise because change affects and is affected by human emotions, both at an individual and collective level. It is an insightful read for senior management and HR professionals, for all stakeholders who are entrusted with the task of facilitating or bringing about change in an organization, as well as students of change. For the general reader, the book can be a journey in self-awareness and growth. The Deliberate Sinner *Sristhi Publishers & Distributors* Is there an acid test to gauge the success of a relationship? Is it right to carry on in an unhealthy relationship with no conjugal bliss, or look for an alternate path? Rihana is an adventurous and free-spirited girl, until she marries Veer, an eligible bachelor who comes from a wealthy family. While they appear 'happily married', their strong personalities are at odds. Veer, for the most part, is insensitive to Rihana's physical and emotional needs, straining the relationship and leaving her feeling incomplete. Caught between the devil and the deep sea, Rihana has to now decide whether to walk out of her marriage and be a victim of society's ridicule, or compromise on her physical needs, which for her are the foundation for a healthy marital bond. Can they work out their differences? Will Veer give her what she desires, or push her to do something desperate and scandalous? Poverty, Chronic Poverty and Poverty Dynamics Policy Imperatives *Springer* This book discusses critical policy issues that need to be addressed if India wishes to achieve the SDG 1 based elusive goal of ending poverty in the country. In its nine chapters, it takes the readers through trends and estimates of poverty in India, explains changes in the way it has been measured over time and the factors that lead to persistence of poverty, draws attention to the fact that hunger is both a cause and an effect of poverty and has gender and age dimensions too. The book revisits strategies that were successful in addressing poverty emanating from situations of conflict, presents a discussion on migration as a critical coping mechanism among poor, analyses the links between ill health and poverty as well as education and poverty to draw attention to the policy imperatives that need attention. India's report card on poverty remains dismal even though there is recognition of the importance of reducing or eliminating or ending it at both national and global levels. Despite rapid economic growth and improvement on a range of development indicators, an unacceptably high proportion of India's population continues to suffer poverty in multiple dimensions. SDG 1 or "ending poverty in all its forms everywhere" cannot be achieved unless policies and poverty alleviation programmes understand and address chronic poverty and its dynamics. This requires that we estimate and understand the extent of poverty, the factors that lead to people getting stuck in it and the ways this can be addressed. It also requires understanding the dynamic nature of poverty or the fact that many of those who are poor are able to move out of poverty as well as the fact that many others who are not poor become impoverished. These are the issues that are comprehensively examined and addressed in this book. In addition to students, teachers and researchers in the areas of development, economic growth, equity and welfare, the book is also of great interest to policy makers, planners and non-government agencies who are concerned with understanding and addressing poverty-related issues in the developing countries. Crude Oil New Technologies and Recent Approaches *BoD - Books on Demand* Petroleum crude oil is the main energy source worldwide. However, global fossil fuel resources and reservoirs are rapidly and disturbingly being depleted. Thus, it is particularly important to shed light on new techniques developed for economic production and better utilization of crude oil. In addition, the processes involved in the production, refining, and transportation of crude oil are environmentally hazardous. It is essential to develop cleaner technologies and to find innovative solutions to overcome these problems. Over four sections, this book discusses materials used in cracking crude oil and improving its specifications, methods for reducing or eliminating the hazardous effects of

petroleum pollution, and the environmental effects of crude oil, as well as presents case studies from different countries. The Politics of Economic Restructuring in India Economic Governance and State Spatial Rescaling *Routledge* State re-scaling is the central concept mobilized in this book to interpret the political processes that are producing new economic spaces in India. In the quarter century since economic reforms were introduced, the Indian economy has experienced strong growth accompanied by extensive sectoral and spatial restructuring. This book argues that in this reformed institutional context, where both state spaces and economic geographies are being rescaled, subnational states play an increasingly critical role in coordinating socioeconomic activities. The core thesis that the book defends is that the reform process has profoundly reconfigured the Indian state's rapport with its territory at all spatial scales, and these processes of state spatial rescaling are crucial for comprehending emerging patterns of economic governance and growth. It demonstrates that the outcomes of India's new policy regime are not only the product of impersonal market forces, but that they are also the result of endogenous political strategies, acting in conjunction with the territorial reorganisation of economic activities at various scales, ranging from local to global. Extensive empirical case material, primarily from field-based research, is used to support these theoretical assertions. Scholars of political economy, political and economic geography, industrial development, development studies and Asian Studies will find this a stimulating and innovative contribution to the study of the political economy in the developing countries. Fundamentals of Mathematical Statistics *Sultan Chand & Sons* Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. 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The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Some prominent additions are given below: 1. Variance of Degenerate Random Variable 2. Approximate Expression for Expectation and Variance 3. Lyapounov's Inequality 4. Holder's Inequality 5. Minkowski's Inequality 6. Double Expectation Rule or Double-E Rule and many others Agriculture and Food Production *Elsevier* Presenting a stimulating synthesis of rapidly growing research interests and publications by scholars in the field of applied mycology and biotechnology. The surge of research and development activity in applied mycology and fungal biotechnology relates to the need and utility of fungi in many contexts. These contexts are wide in scope, and include agriculture, animal and plant health, biotransformation of organic or inorganic matter, food safety, composition of nutrients and micronutrients, and human and animal infectious disease. Containing a balanced treatment of principles, biotechnological manipulations and applications of major groups of fungi in agriculture and food, this book will serve as a practical resource for mycologists, microbiologists, biotechnologists, bioengineers, scientists from agri-food industry, biochemists, botanists and agriculturists. Fundamentals of Information Technology Including MS Office *Firewall Media* RNA-Based Regulation in Human Health and Disease *Academic Press* RNA-based Regulation in Human Health and Disease offers an in-depth exploration of RNA mediated genome regulation at different hierarchies. Beginning with multitude of canonical and non-canonical RNA populations, especially noncoding RNA in human physiology and evolution, further sections examine the various classes of RNAs (from small to large noncoding and extracellular RNAs), functional categories of RNA regulation (RNA-binding proteins, alternative splicing, RNA editing, antisense transcripts and RNA G-quadruplexes), dynamic aspects of RNA regulation modulating physiological homeostasis (aging), role of RNA beyond humans, tools and technologies for RNA research (wet lab and computational) and future prospects for RNA-based diagnostics and therapeutics. One of the core strengths of the book includes spectrum of disease-specific chapters from experts in the field highlighting RNA-based regulation in metabolic & neurodegenerative disorders, cancer, inflammatory disease, viral and bacterial infections. We hope the book helps researchers, students and clinicians appreciate the role of RNA-based regulation in genome regulation, aiding the development of useful biomarkers for prognosis, diagnosis, and novel RNA-based therapeutics. Comprehensive information of non-canonical RNA-based genome regulation modulating human health and disease Defines RNA classes with special emphasis on unexplored world of noncoding RNA at different hierarchies Disease specific role of RNA - causal, prognostic, diagnostic and therapeutic Features contributions from leading experts in the field Airport Engineering: Planning & Design (PB) Insights Into Drug Resistance in Staphylococcus aureus *BoD - Books on Demand* Staphylococcus aureus is a coccus, gram-positive, non-spore forming, and non-motile bacterium. Its commensal and opportunistic capabilities make it able to colonize different sites of animals and humans. Resistance to antibiotics has resulted in development of new strains and new types within strains. Types of methicillin-resistant S. aureus (MRSA) include hospital-acquired MRSA (HA-MRSA), community-acquired MRSA (CA-MRSA), and livestock-acquired MRSA (LA-MRSA). There are also new strains like vancomycin-resistant S. aureus (VISA) and vancomycin-intermediate S. aureus (VRSA) and vancomycin-intermediate S. aureus (VISA). Expansion in resistance is expected to give rise to newer strains resistant to antibiotics such as macrolide (erm gene), tetracycline (tet genes), mupirocin (mupR), and fusidic acid (fusD). Alternative approaches like nanoparticles, bacteriophages, phytochemicals, and more are required to tackle this pathogen. This book contains information on epidemiology, resistance mechanisms, and alternative ways to curtail S. aureus infection, as well as future research opportunities. Global Business Transcendence International Perspectives Across Developed and Emerging Economies *Springer* Global Business Transcendence focuses on both empirical studies with practical application and examinations of theoretical and methodological developments in the field of business studies. By drawing on important research and case study material from contributors all over the world, this collection offers genuinely international perspectives on the key issues and concerns preoccupying policy and decision makers, bringing together chapters that examine international business strategies across emerged and emerging economies. The collection argues that country's borders are becoming less important from a trade perspective. We are thus quickly approaching a single global economy. Advertising Confluence Transitioning Marketing Communications into Social Movements *Springer* Advertising Confluence offers a unique blend of both traditional and contemporary social media thinking about advertising and integrated brand promotions throughout the world. Dr. Arora Anshu and Dr. Sabine Bacouel-Jentjens bring together articles that analyze creative social advertising in US, France, and Tunisia and offer a wide spectrum of advertising confluence from both the developed and emerging world. Contributors focus on both empirical studies with practical application as well as examinations of theoretical and methodological developments in the field of advertising studies. In all, they examine the wide range of global and local advertising strategies, the depth of integrated marketing communications, and the future of social media advertising. Genetic Enhancement in Major Food Legumes Advances in Major Food Legumes *Springer* The protein molecule is the basic building block of every living entity. Its deficiency leads to restricted growth and development of individuals. Globally, such malnutrition is on the rise due to various reasons such as rapid population growth, stagnation of productivity, and ever-rising costs. Millions of people, especially in developing and under-developed countries, suffer from protein malnutrition and the only possible solution is to encourage farmers to grow high-protein food legume crops in their fields for domestic consumption. This, however, could be possible if farmers are provided with new cultivars with high yield, and resistance to major insects, diseases, and key abiotic stresses. The major food legume crops are chickpea, cowpea, common bean, groundnut, lentil, pigeonpea, and soybean. Predominantly, the legume crops are grown under a subsistence level and, therefore, in comparison to cereals and horticultural crops their productivity is low and highly variable. The crop breeders around the globe are engaged in breeding suitable cultivars for harsh and changing environments but success has been limited and not up to needs. With the recent development of new technologies in plant sciences, efforts are being made to help under-privileged farmers through breeding new cultivars which will produce more protein per unit of land area. In this book, the contributors analyze the constraints, review new technologies, and propose a future course of crop breeding programs in seven cold and warm season legume crops. Renewable Energy Optimization, Planning and Control Proceedings of IC RTE 2021, Volume 1 *Springer Nature* This book gathers selected high-quality research papers presented at International Conference on Renewable Technologies in Engineering (IC RTE 2021) organized by Manav Rachna International Institute of Research & Studies, Faridabad, Haryana, India, during 15-16 April 2021. The book includes conference papers on the theme "Computational Techniques for Renewable Energy Optimization", which aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of renewable energy integration, planning, control and optimization. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends and concerns as well as practical challenges encountered and solutions adopted in the fields of renewable energy and resources. The Girl In Room 105 *Harper Collins* Hi, I'm Keshav, and my life is screwed. I hate my job and my girlfriend left me. Ah, the beautiful Zara. Zara is from Kashmir. She is a Muslim. And did I tell you my family is a bit, well, traditional? Anyway, leave that. Zara and I broke up four years ago. She moved on in life. I didn't. I drank every night to forget her. I called, messaged, and stalked her on social media. She just ignored me. However, that night, on the eve of her birthday, Zara messaged me. She called me over, like old times, to her hostel room 105. I shouldn't have gone, but I did ... and my life changed forever. This is not a love story. It is an un-love story. From the author of Five Point Someone and 2 States, comes a fast-paced, funny and unputdownable thriller about obsessive love and finding purpose in life against the backdrop of contemporary India. Physics Galaxy 2020-21 Vol.1 - Mechanics 2e *G.K Publications Pvt.Limited* Physics galaxy by Ashish Arora is a result of deep stress and serious efforts of the brain of distinguished academician Ashish Arora to ensure fundamental understanding and advance applications of concepts in Physics. This series includes four books which cover the complete syllabus of class XI and XII. In these books, under each topic numerous illustrations are included for better understanding of the concept. Also to help in understanding the right method to solve questions, systematically step by step approach is adopted in easy and simple explanation for each solved Example. After every topic comprehensive time bound tests are given to strengthen the objective and comprehensive abilities of students. You can also avail access to the world's largest encyclopaedia of online video lectures for high school Physics at [www.Physicsgalaxy.Com](http://www.Physicsgalaxy.Com). These exclusive lectures are prepared by Ashish Arora. Everyday view count of these lectures is 30000+ and till now more than 24 million lectures have been watched by students in 180+ countries. Physics galaxy is undoubtedly among the best Physics textbooks for Class XI and Class XII. Some highlights of the book include: a. Systematically step-by-step approach for easy understanding B. Time bound tests after every topic C. As per latest

syllabus. **Plant Microbes Symbiosis: Applied Facets** *Springer* Plants form mutualistic association with various microorganisms, particularly in the rhizosphere region. The association benefits both the partners in a number of ways. A single plant can support the growth of diverse microbes and in reciprocation these microbes help the plant in several ways. A great deal of knowledge is now available on the mechanisms of action of plant growth promoting microbes in forming association with their partner plant and benefitting it. With ever increasing population and to achieve food security it has become utmost necessary to utilize these friendly microbes to enhance the crop yield and quality in an ecofriendly and sustainable manner. We already know about the huge negative impact of chemicals used in agriculture on the humans and the ecosystems as whole. 'Plant Microbes Symbiosis - Applied Facets' provides a comprehensive knowledge on practical, functional and purposeful utility of plant-microbe interactions. The book reviews the utilization of beneficial microbes for crop yield enhancement and protection against diseases caused by phytopathogens and nutrient deficiencies. The tome also reviews the utility of plant growth promoting microbes in helping the plants to deal with abiotic stresses imposed by climate change and anthropogenic activities. The book showcases how plant-microbe interactions are or can be utilized for reclamation of stressed soils and degradation of pollutants in a most effective and environment friendly manner. It also ascertains the reasons for the below par performance of the microbial based inoculants. The utilization of biotechnological tools for development of next generation bioformulations to combat the new challenges and overcome past hurdles has been discussed. This wonderful association between plants and microbes if used properly will not only enhance the crop yields and reclaim barren lands but also make our planet a better place to live on for all of its inhabitants. **Mathematics and Computation A Theory Revolutionizing Technology and Science** *Princeton University Press* An introduction to computational complexity theory, its connections and interactions with mathematics, and its central role in the natural and social sciences, technology, and philosophy Mathematics and Computation provides a broad, conceptual overview of computational complexity theory—the mathematical study of efficient computation. With important practical applications to computer science and industry, computational complexity theory has evolved into a highly interdisciplinary field, with strong links to most mathematical areas and to a growing number of scientific endeavors. Avi Wigderson takes a sweeping survey of complexity theory, emphasizing the field's insights and challenges. He explains the ideas and motivations leading to key models, notions, and results. In particular, he looks at algorithms and complexity, computations and proofs, randomness and interaction, quantum and arithmetic computation, and cryptography and learning, all as parts of a cohesive whole with numerous cross-influences. Wigderson illustrates the immense breadth of the field, its beauty and richness, and its diverse and growing interactions with other areas of mathematics. He ends with a comprehensive look at the theory of computation, its methodology and aspirations, and the unique and fundamental ways in which it has shaped and will further shape science, technology, and society. For further reading, an extensive bibliography is provided for all topics covered. Mathematics and Computation is useful for undergraduate and graduate students in mathematics, computer science, and related fields, as well as researchers and teachers in these fields. Many parts require little background, and serve as an invitation to newcomers seeking an introduction to the theory of computation. Comprehensive coverage of computational complexity theory, and beyond High-level, intuitive exposition, which brings conceptual clarity to this central and dynamic scientific discipline Historical accounts of the evolution and motivations of central concepts and models A broad view of the theory of computation's influence on science, technology, and society Extensive bibliography **Deep Natural Language Processing and AI Applications for Industry 5.0** *Engineering Science Reference* "This book is a collection of contributed chapters of latest research findings, ideas, and applications in the fields of Natural Language Processing and their applications, Computational Linguistics, Deep NLP, Web Analysis, Sentiments analysis for business and industry"-- **Logic and Complexity** *Springer Science & Business Media* Logic and Complexity looks at basic logic as it is used in Computer Science, and provides students with a logical approach to Complexity theory. With plenty of exercises, this book presents classical notions of mathematical logic, such as decidability, completeness and incompleteness, as well as new ideas brought by complexity theory such as NP-completeness, randomness and approximations, providing a better understanding for efficient algorithmic solutions to problems. Divided into three parts, it covers: - Model Theory and Recursive Functions - introducing the basic model theory of propositional, 1st order, inductive definitions and 2nd order logic. Recursive functions, Turing computability and decidability are also examined. - Descriptive Complexity - looking at the relationship between definitions of problems, queries, properties of programs and their computational complexity. - Approximation - explaining how some optimization problems and counting problems can be approximated according to their logical form. Logic is important in Computer Science, particularly for verification problems and database query languages such as SQL. Students and researchers in this field will find this book of great interest. **Basic Civil Engineering** *Firewall Media* **Practical Railway Engineering** *Imperial College Press* This textbook covers the very wide spectrum of all aspects of railway engineering for all engineering disciplines, in a 'broad brush' way giving a good overall knowledge of what is involved in planning, designing, constructing and maintaining a railway. It covers all types of railway systems including light rail and metro as well as main line. The first edition has proved very popular both with students new to railways and with practicing engineers who need to work in this newly expanding area. In the second edition, the illustrations have been improved and brought up to date, particularly with the introduction of 30 colour pages which include many newly taken photographs. The text has been reviewed for present day accuracy and, where necessary, has been modified or expanded to include reference to recent trends or developments. New topics include automatic train control, level crossings, dot matrix indicators, measures for the mobility impaired, reinforced earth structures, air conditioning, etc. Recent railway experience, both technical and political, has also been reflected in the commentary. **Data Analytics and Management Proceedings of ICDAM** *Springer Nature* This book includes original unpublished contributions presented at the International Conference on Data Analytics and Management (ICDAM 2020), held at Jan Wzykowski University, Poland, during June 2020. The book covers the topics in data analytics, data management, big data, computational intelligence, and communication networks. The book presents innovative work by leading academics, researchers, and experts from industry which is useful for young researchers and students. **Bridge Engineering** The book aims at presenting the topics of Bridge Engineering expressed in simple and lucid language. The presentation is comprehensive and methodical as well as interesting and easy to follow. **Managing Social Robotics and Socio-cultural Business Norms Parallel Worlds of Emerging AI and Human Virtues** *Springer Nature* This book explores the co-existence of humans and AI in business contexts. Though AI and social robots have become ubiquitous, there are still many challenges facing technological expansion, including a true understanding of abstract concepts, transfer of knowledge to novel application problems, transparency and security guarantees, and distinguishing between random and logically meaningful relationships. While machines are valuable tools, only humans are capable of recognizing values which are the key to ethics and socio-cultural norms. Further, human virtues such as emotional intelligence, wisdom, and courage are required for decision making in many (private and professional) situations where machines would lead to sub-optimal and/or ethically questionable business outcomes. This book discusses how digital technology has emerged as a critical support system for organizations during the COVID-19 pandemic and how it can be used to complement human qualities that machines lack. It is divided into three sections that examine the complex world of AI and social robotics, digital technology and social media roles in business, and human actions that are embedded within socio-cultural business norms, such as international negotiations, that are not yet replaceable by AI. For researchers interested in understanding these parallel worlds, this book assesses how can continue to not only coexist but mutually benefit the business ecosystem. **Internet of Things Energy, Industry, and Healthcare** *CRC Press* Internet of things (IoT) is the connection and communication of physical objects (smart devices) over the internet. In this recent age, people's daily lives are dependent on the internet through their smartphones, tablets, Smart TVs, micro-controllers, Smart Tags, computers, laptops, and cars to name a few. This book discusses different ways to create a better IoT network and/or IoT platforms to improve the efficiency and quality of these products and subsequently their users' lives. In addition, this book provides future research directions in energy, industry, and healthcare, and explores the different applications of IoT and its associated technologies. It provides an overview and explanation of the software architecture, middleware, data processing and data management as well as security, sensors, actuators and algorithms used to create a working IoT platform. The editors then go on to examine IoT networks and platforms as they relate to energy industry including, energy efficiency and management, intelligent energy management, smart energy through blockchain and energy-efficient/aware routing/scheduling challenges and issues. They then explore IoT as it applies to healthcare including biomedical image and signal analysis and disease prediction and diagnosis. Finally the editors examine the prospects and applications of IoT for industry through the concepts of smart industry, including architecture, blockchain, and Industry 4.0. This book is intended for senior undergraduate and graduate students, researchers and industry professionals working on IoT applications and infrastructure. **Global Perspectives on Ethics of Corporate Governance** *Springer* This volume takes a hard look at the soft practice of corporate governance. It grew out of a series of contributions from the Third ISBEE World Congress on Business Ethics that took place on July 2004 in Melbourne.