

Case Studies Solution To Starting Right Case 110

The aim of the book is to give an up-to-date review on dam-break problems, along with the main theoretical background and the practical aspects involved in dam failures, design of flood defense structures, prevention measures and the environmental social, economic and forensic aspects related to the topic. Moreover, an exhaustive range of laboratory tests and modeling techniques is explored to deal effectively with shock waves and other disasters caused by dam failures. Disaster management refers to programs and strategies designed to prevent, mitigate, prepare for, respond to and recover from the effects of these phenomena. To manage and minimize these risks, it is necessary to identify hazards and vulnerability by means of a deep knowledge of the causes which drive to dam failures, and to understand the flow propagation process. Knowledge and advanced scientific tools play a role of paramount importance of coping with flooding and other dam-break problems along with capacity building in the context of political and administrative frameworks. All these aspects are featured in the book, which is a comprehensive treaty that covers the most theoretical and advanced aspects of structural and hydraulic engineering, together with the hazard assessment and mitigation measures and the social economic and forensic aspects related to subject.

Since the end of the Cold War, conflict prevention and resolution, peacekeeping and peacebuilding have risen to the top of the international agenda. The second edition of this hugely popular text charts the development of the field from its pioneers to its contemporary exponents and offers an assessment of its achievements and the challenges it faces in today's changed security environment. Existing material has been thoroughly updated and new chapters added on peacebuilding from below, reconciliation, responses to terror, gender issues, the ethics of intervention, dialogue, discourse and disagreement, culture and conflict resolution, and future directions for the field. The authors argue that a new form of cosmopolitan conflict resolution is emerging, which offers a hopeful means for human societies to transcend and celebrate their differences. Part I offers a comprehensive survey of the theory and practice of conflict resolution. Part II enters into the controversies that have surrounded conflict resolution as it has become part of the mainstream. Contemporary Conflict Resolution is essential reading for students of peace and security studies, conflict management and international politics, as well as those working in non-government organizations or think-tanks.

Volume 18 will focus on approaches to thinking about and creating the start-up. Both theoretical and empirical manuscripts that consider all aspects of start-up planning, thinking and action will be considered. We also encourage practice-based research and manuscripts that explore cutting-edge pedagogical approaches.

Library services are dependent on technology tools in order to host, distribute, and control content. Today, many libraries are creating, testing, and supporting their own tools to better suit their particular communities. Developing In-House Digital Tools in Library Spaces is a pivotal reference source with the latest empirical research on organizational issues, examples of library automation, case studies of developing library products, and assessment of the impact and usefulness of in-house technologies. Featuring coverage on a broad range of topics such as linked data, mobile applications, and web analytics, this book is ideally designed for academicians, researchers, students, and librarians seeking current research on technological products and their development in library use.

Title page -- Contents -- 1. Introduction -- 2 . The Legal Challenges -- 3. Trends in Health Telematics -- 4. The CoCo Guide to EDI Security -- 5. Security Architecture of the Star Project -- 6. The TrustHealth Pilot Experiment in Danderyd Hospital -- 7. Security Infrastructure for a Regional Electronic Medical Record -- 8. Security and the RHINE Project -- 9. The TIDDM Project and Security -- 10. Security Aspects in Relation to the HISA Standard Middleware Architecture -- 11. Using S/MIME for Health Insurance Claims -- 12. Summary of Described Security Problems and Solutions -- 13. Recommendations from SIREN -- 14. Authors -- 15. Bibliography -- 16. Websites -- Author Index

This is an excellent textbook, suitable as a core text for environmental engineers and environmental scientists but equally it should, in my opinion, be compulsory reading for all researchers, practitioners, and policy-makers regardless of their discipline because it has relevance for all. In fact, the book is so lively and understandable that everyone and anyone could and should read it. . . Clearly written by a team of recognised environmental authors drawn from around the world, it guides the reader through current thinking on the tools and techniques industry. . . As an academic, it is a delight to find a book to recommend that I know students will enjoy and one which addresses so many different elements of a diversity of university courses, while covering the most important areas of environmental technology and management. I am certainly using it to enhance and update the content of some of my own lectures. Susan Haile, International Journal of Sustainable Engineering This substantial collection draws together a very wide variety of literatures and practices. . . I would expect this book to be a popular purchase by academic libraries, principally as a core text. R&D Management This stunning Handbook is an excellent tool for environmental manager and environmental officer alike. It is brimful of ideas, case studies and methodologies which stimulate continuous improvement thinking and help train staff to implement sustainability and environmental management concepts. Highly recommended. Eagle Bulletin This important Handbook is the first comprehensive account that brings together recent developments in the three related fields of environmental technology, environmental management and technology management. With contributions from more than 55 outstanding authors representing ten countries and five continents, the reader is provided with a vast range of insightful perspectives on the latest industry and policy issues. With the aid of numerous case studies, leading experts reflect on significant changes in the use of technology and management practices witnessed in the last decade. Within this Handbook, the authors discuss, in detail: eco-modernization and technology transformation environmental technology management in business practices measuring environmental technology management case studies in new technologies for the environment environmental

technology management and the future. The International Handbook on Environmental Technology Management has a broad audience including researchers, practitioners, policymakers and students in the fields of sustainability and environmental science.

Macromolecular Crystallography is the study of macromolecules (proteins and nucleic acids) using X-ray crystallographic techniques in order to determine their molecular structure. The knowledge of accurate molecular structures is a pre-requisite for rational drug design, and for structure-based function studies to aid the development of effective therapeutic agents and drugs. The successful determination of the complete genome (genetic sequence) of several species (including humans) has recently directed scientific attention towards identifying the structure and function of the complete complement of proteins that make up that species; a new and rapidly growing field of study called 'structural genomics'. There are now several important and well-funded global initiatives in operation to identify all of the proteins of key model species. One of the main requirements for these initiatives is a high-throughput crystallization facility to speed-up the protein identification process. The extent to which these technologies have advanced, calls for an updated review of current crystallographic theory and practice. This practical reference book features the latest conventional and high-throughput methods, and includes contributions from a team of internationally recognized leaders and experts. It will be of relevance and use to graduate students, research scientists and professionals currently working in the field of conventional and high-throughput macromolecular crystallography.

Covers a wide range of practical fluid mechanics, heat transfer, and mass transfer problems This book covers the many issues that occur in practical fluid mechanics, heat transfer, and mass transfer, and examines the basic laws (the conservation of matter, conservation of momentum, conservation of energy, and the second law of thermodynamics) of these areas. It offers problem solutions that start with simplifying engineering assumptions and then identifies the governing equations and dependent and independent variables. When solutions to basic equations are not possible, the book utilizes historical experimental studies. It also looks at determining appropriate thermo-physical properties of the fluid under investigation, and covers solutions to governing equations with experimental studies. Case Studies in Fluid Mechanics with Sensitivities to Governing Variables offers chapters on: draining fluid from a tank; vertical rise of a weather balloon; wind drag forces on people; Venturi meter; fluid's surface shape in a rotating cylindrical tank; range of an aircraft; designing a water clock; water turbine under a dam; centrifugal separation of particles; ideal gas flow in nozzles and diffusers; water supply from a lake to a factory; convection mass transfer through air-water interface; heating a room by natural convection; condensation on the surface of a vertical plate in laminar flow regime; bubble rise in a glass of beer; and more. Covers a broad spectrum of problems in practical fluid mechanics, heat transfer, and mass transfer Examines the basic laws of fluid mechanics, heat transfer and mass transfer Presents solutions to governing equations with experimental studies Case Studies in Fluid Mechanics with Sensitivities to Governing Variables will appeal to engineers working in thermo-physical sciences and graduate students in mechanical engineering.

Enhanced Oil Recovery Field Case Studies bridges the gap between theory and practice in a range of real-world EOR settings. Areas covered include steam and polymer flooding, use of foam, in situ combustion, microorganisms, "smart water"-based EOR in carbonates and sandstones, and many more. Oil industry professionals know that the key to a successful enhanced oil recovery project lies in anticipating the differences between plans and the realities found in the field. This book aids that effort, providing valuable case studies from more than 250 EOR pilot and field applications in a variety of oil fields. The case studies cover practical problems, underlying theoretical and modeling methods, operational parameters, solutions and sensitivity studies, and performance optimization strategies, benefitting academicians and oil company practitioners alike. Strikes an ideal balance between theory and practice Focuses on practical problems, underlying theoretical and modeling methods, and operational parameters Designed for technical professionals, covering the fundamental as well as the advanced aspects of EOR

PROBABILITY AND STATISTICS FOR ENGINEERS AND SCIENTISTS, Fourth Edition, continues the student-oriented approach that has made previous editions successful. As a teacher and researcher at a premier engineering school, author Tony Hayter is in touch with engineers daily--and understands their vocabulary. The result of this familiarity with the professional community is a clear and readable writing style that students understand and appreciate, as well as high-interest, relevant examples and data sets that keep students' attention. A flexible approach to the use of computer tools, including tips for using various software packages, allows instructors to choose the program that best suits their needs. At the same time, substantial computer output (using MINITAB and other programs) gives students the necessary practice in interpreting output. Extensive use of examples and data sets illustrates the importance of statistical data collection and analysis for students in the fields of aerospace, biochemical, civil, electrical, environmental, industrial, mechanical, and textile engineering, as well as for students in physics, chemistry, computing, biology, management, and mathematics. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Power system modelling and scripting is a quite general and ambitious title. Of course, to embrace all existing aspects of power system modelling would lead to an encyclopedia and would be likely an impossible task. Thus, the book focuses on a subset of power system models based on the following assumptions: (i) devices are modelled as a set of nonlinear differential algebraic equations, (ii) all alternate-current devices are operating in three-phase balanced fundamental frequency, and (iii) the time frame of the dynamics of interest ranges from tenths to tens of seconds. These assumptions basically restrict the analysis to transient stability phenomena and generator controls. The modelling step is not self-sufficient. Mathematical models have to be translated into computer programming code in order to be analyzed, understood and "experienced". It is an object of the book to provide a general framework for a power system analysis software tool and hints for filling up this framework with versatile programming code. This book is for all students and

researchers that are looking for a quick reference on power system models or need some guidelines for starting the challenging adventure of writing their own code. Windows Forensic Analysis DVD Toolkit, 2nd Edition, is a completely updated and expanded version of Harlan Carvey's best-selling forensics book on incident response and investigating cybercrime on Windows systems. With this book, you will learn how to analyze data during live and post-mortem investigations. New to this edition is Forensic Analysis on a Budget, which collects freely available tools that are essential for small labs, state (or below) law enforcement, and educational organizations. The book also includes new pedagogical elements, Lessons from the Field, Case Studies, and War Stories that present real-life experiences by an expert in the trenches, making the material real and showing the why behind the how. The companion DVD contains significant, and unique, materials (movies, spreadsheet, code, etc.) not available anywhere else because they were created by the author. This book will appeal to digital forensic investigators, IT security professionals, engineers, and system administrators as well as students and consultants. Best-Selling Windows Digital Forensic book completely updated in this 2nd Edition Learn how to Analyze Data During Live and Post-Mortem Investigations DVD Includes Custom Tools, Updated Code, Movies, and Spreadsheets!

Conquer the online marketplace with this new version of a bestseller! Whether you've thought of starting an online business or you're already selling online, this update to a bestseller presents invaluable advice for getting--and keeping--online customers. Covering everything from creating a business plan and building a customer-friendly site to marketing with Facebook and Twitter, this fun and friendly guide features eleven minibooks that cover online business basics, legal and accounting matters, website design, online and operating issues, Internet security, techniques for boosting sales, storefront selling, fundraising sites, niche e-commerce, and more. Updated to include coverage of the latest online marketing tools, techniques, and trends Includes coverage of how to use social media sites like Facebook, Twitter, Foursquare, and Yelp to reach your customers as well as expanded coverage of mobile marketing Explains how your location can actually bring new customers to you Details ways to build a business plan that translates your ideas into a profitable enterprise Shares advice for choosing software to help you manage taxes, balance sheets, and other accounting chores; using PR and advertising tools that best promote your business online, including Google AdWords; and create a website that helps your business make money Discover why "online entrepreneurship" means more than just building a website. Starting an Online Business All-in-One For Dummies breaks down everything the budding entrepreneur needs to know to be successful online and keep your customers coming back for more.

Proceedings of the June, 1998 conference. Seventy contributions discuss Monte Carlo and signal processing methods, random vibrations, safety and reliability, control/optimization and modeling of nonlinearity, earthquake engineering, random processes and fields, damage/fatigue materials, applied prob

This ready reference not only presents the hot and emerging topic of modern flow chemistry, it is also unique in illustrating the important connection to sustainable chemistry. Focusing on more sustainable methods and applications, the text extensively covers every important field from reaction time optimization to waste minimization, and from safety improvements to microwave applications. In addition, green metrics are presented as a key aspect of the book, helping readers to evaluate the efficiency of flow technologies and their impact on the overall efficiency of a chemical process. An invaluable handbook for every chemist working in the laboratory, whether in academia or industry.

This book gathers the peer-reviewed and revised versions of papers from the Seventh International Conference on Design Computing and Cognition (DCC'16), held at Northwestern University, Evanston (Chicago), USA, from 27–29 June 2016. The material presented here reflects cutting-edge design research with a focus on artificial intelligence, cognitive science and computational theories. The papers are grouped under the following nine headings, describing advances in theory and applications alike and demonstrating the depth and breadth of design computing and design cognition: Design Creativity; Design Cognition - Design Approaches; Design Support; Design Grammars; Design Cognition - Design Behaviors; Design Processes; Design Synthesis; Design Activity and Design Knowledge. The book will be of particular interest to researchers, developers and users of advanced computation in design across all disciplines, and to all readers who need to gain a better understanding of designing.

The world's leading expert on the global software industry and coauthor of the bestseller Microsoft Secrets reveals the inner workings of software giants like IBM, Microsoft, and Netscape and shows what it takes to create, develop, and manage a successful company -- in good times and bad -- in the most fiercely competitive business in the world. In the \$600 billion software industry it is the business, not the technology, that determines success or failure. This fact -- one that thousands of once glamorous start-ups have unhappily discovered for themselves -- is the well-documented conclusion of this enormously readable and revealing new book by Michael Cusumano, based on nearly twenty years of research and consulting with software producers around the world. Cusumano builds on dozens of personal experiences and case studies to show how issues of strategy and organization are irrevocably linked with those of managing the technology and demonstrates that a thorough understanding of these issues is vital to success. At the heart of the book Cusumano poses seven questions that underpin a three-pronged management framework. He argues that companies must adopt one of three basic business models: become a products company at one end of the strategic spectrum, a services company at the other end, or a hybrid solutions company in between. The author describes the characteristics of the different models, evaluates their strengths and weaknesses, and shows how each is more or less appropriate for different stages in the evolution of a business as well as in good versus bad economic times. Readers will also find invaluable Cusumano's treatment of software development issues ranging from architecture and teams to project management and testing, as well as two chapters devoted to what it takes to create a successful software start-up. Highlights include eight fundamental guidelines for evaluating potential software winners and Cusumano's probing analysis, based on firsthand knowledge, of ten start-ups that have met with varying degrees of

success. The Business of Software is timely essential reading for managers, programmers, entrepreneurs, and others who follow the global software industry.

This book contains selected papers from the First International Conference on Progress in Digital and Physical Manufacturing (ProDPM'19), organized by the School of Technology and Management (ESTG) of the Polytechnic Institute of Leiria (IPL). It presents a significant contribution to the current advances in digital and physical manufacturing issues as it contains topical research in this field. The book content is of interest to those working on digital and physical manufacturing, promoting better links between the academia and the industry. The conference papers cover a wide range of important topics like biomanufacturing, advanced rapid prototyping technologies, rapid tooling and manufacturing, micro-fabrication, 3D CAD and data acquisition, and collaborative design.

Written for practicing geophysicists, "Land Seismic Case Studies for Near-Surface Modeling and Subsurface Imaging" is a comprehensive guide to understanding and interpreting seismic data. The culmination of land seismic data acquisition and processing projects conducted by the author over the last two decades, this book contains more than nearly 800 figures from worldwide case studies—conducted in both 2D and 3D. Beginning with Chapter 1 on seismic characterization of the near-surface, Chapter 2 presents near-surface modeling by traveltimes and full-wave inversion, Chapter 3 presents near-surface modeling by imaging, and then Chapter 4 includes detailed case studies for near-surface modeling. Chapter 5 reviews single- and multichannel signal processing of land seismic data with the key objective of removing surface waves and guided waves that are characterized as coherent linear noise. Uncommon seismic data acquisition methods, including large-offset acquisition in thrust belts to capture the large-amplitude supercritical reflections, swath-line acquisition, and joint PP and SH-SH seismic imaging are highlighted in Chapter 6, and Chapter 7 presents image-based rms velocity estimation and discusses the problem of velocity uncertainty. The final two chapters focus exclusively on case studies: 2D in Chapter 8 and 3D in Chapter 9. An outstanding teaching tool, this book includes analysis workflows containing processing steps designed to solve specific problems. Essential for anyone involved in acquisition, processing, and inversion of seismic data, this volume will become the definitive reference for understanding how the variables in seismic acquisition are directly reflected in the data.

The first book of Failure Analysis Case Studies selected from volumes 1, 2 and 3 of the journal Engineering Failure Analysis was published by Elsevier Science in September 1998. The book has proved to be a sought-after and widely used source of reference material to help people avoid or analyse engineering failures, design and manufacture for greater safety and economy, and assess operating, maintenance and fitness-for-purpose procedures. In the last three years, Engineering Failure Analysis has continued to build on its early success as an essential medium for the publication of failure analysis cases studies and papers on the structure, properties and behaviour of engineering materials as applied to real problems in structures, components and design. Failure Analysis Case Studies II comprises 40 case studies describing the analysis of real engineering failures which have been selected from volumes 4, 5 and 6 of Engineering Failure Analysis. The case studies have been arranged in sections according to the specific type of failure mechanism involved. The failure mechanisms covered are overload, creep, brittle fracture, fatigue, environmental attack, environmentally assisted cracking and bearing failures. The book constitutes a reference set of real failure investigations which should be useful to professionals and students in most branches of engineering.

The Higher Education Institutions that run business management programs in Malaysia is under severe criticism from industry that the passing out management graduates do not have adequate practical exposure to the industry and lack of practical skills to deal industrial issues proactively as the catalyst of change. This indicates that the traditional management education curriculum, as presently constituted, may not be adequately preparing individuals for the challenges they experience as professional managers. To deal with this issue, many management institutes are adopting case study as a pedagogy, a hypothetical or actual business situation to formulate a recommended policy or decision based on the facts and figures provided, to induce practical exposure to the students by simulating case situations, which improve students analytical skills and decision-making skills. A case study in business management course is a rigorous analysis of an incident, situation, person, crisis or any such phenomenon or concept, in relation to industry, business or people in the organisations.

This book provides a general introduction to the most important methods of applied geophysics with a variety of case studies. These methods represent a primary tool for investigation of the subsurface and are applicable to a very wide range of problems. Applied geophysics is based on physics principles that collect and interpret data on subsurface conditions for practical purposes, including oil and gas exploration, mineral prospecting, geothermal exploration, groundwater exploration, engineering applications, archeological interests, and environmental concerns. The depth of investigation into applied geophysics is shallow, typically from the ground surface to several kilometers deep, where economic, cultural, engineering, or environmental concerns often arise. Applied geophysics uses almost all of the current geophysical methods, including electrical, magnetic, electromagnetic, gravimetric, geothermal, seismic, seismoelectric, magnetotelluric, nuclear, and radioactive methods. In applied geophysics, geophysicists are usually required to have a good understanding of math and physics principles, knowledge of geology and computer skills, and hands-on experience of electronic instruments. A geophysicist's routine job includes survey designs, data acquisition, data processing, and data interpretation with detailed explanation of the study. Applied geophysics consists of three main subject and interest areas, which are exploration geophysics, engineering geophysics, and environmental geophysics.

The concept of platforms emerges in an increasing number of industries and affects customers' changing expectations, industries themselves, and new technologies' availability. Today, most platforms act as a technical foundation and distribution channel for complementary software products. Organizations can join platforms and use them to develop and distribute software products. They become complementors on the platforms. Platforms influence the motivations as well as the organization and affects software products of the

complementors. Among other things, when using platforms, complementors must accept the platforms' specifications (for example, the technologies to be used). These requirements lead to additional work for complementors. The effort for complementors increases if software products are to be offered in parallel on multiple platforms. This publication examines how platforms affect organizations that use multiple platforms. It gives organizations recommendations for action on how to accommodate the platforms' influence.

This series brings together a range of articles, extracts from books and reports that inform an understanding of secondary schools in today's educational climate.

A practical and fast-paced guide that gives you all the information you need to simplify and streamline virtual desktops so you get a production-quality solution while instantly lowering your costs and improving security. Getting Started with Citrix VDI-in-a-Box is great for IT professionals who are new to VDI-in-a-Box and who are looking for a good grounding in the product. You may be planning to research VDI-in-a-Box in more detail, or you may be tasked with researching how VDI-in-a-Box could improve the productivity of your organization. No prior knowledge of VDI-in-a-Box is required, just an understanding of Windows networks.

This book presents a range of cutting edge perspectives on subjects which are central to improving purchasing performance, including supply chain management, outsourcing and partnership, professional development, IT and e-commerce, and performance evaluation.

This three-part book provides a comprehensive and systematic introduction to these challenging topics such as model calibration, parameter estimation, reliability assessment, and data collection design. Part 1 covers the classical inverse problem for parameter estimation in both deterministic and statistical frameworks, Part 2 is dedicated to system identification, hyperparameter estimation, and model dimension reduction, and Part 3 considers how to collect data and construct reliable models for prediction and decision-making. For the first time, topics such as multiscale inversion, stochastic field parameterization, level set method, machine learning, global sensitivity analysis, data assimilation, model uncertainty quantification, robust design, and goal-oriented modeling, are systematically described and summarized in a single book from the perspective of model inversion, and elucidated with numerical examples from environmental and water resources modeling. Readers of this book will not only learn basic concepts and methods for simple parameter estimation, but also get familiar with advanced methods for modeling complex systems. Algorithms for mathematical tools used in this book, such as numerical optimization, automatic differentiation, adaptive parameterization, hierarchical Bayesian, metamodeling, Markov chain Monte Carlo, are covered in details. This book can be used as a reference for graduate and upper level undergraduate students majoring in environmental engineering, hydrology, and geosciences. It also serves as an essential reference book for professionals such as petroleum engineers, mining engineers, chemists, mechanical engineers, biologists, biology and medical engineering, applied mathematicians, and others who perform mathematical modeling.

Provides a collection of applications in mathematics to enable the teacher or student to appreciate relevant uses.

Basic biology course ; book 12 : Unit 5, Aspects of heredity (er)

Cloud computing has caused a marketing fog, confusing business executives seeking to understand the technology's potential applications and business benefits. A Quick-Start Guide to Cloud Computing cuts through the industry hype and provides non-technical explanations about what it is and how it can improve your business. With case studies from large and small business, it shows how enabling a remote workforce and sharing resources can reduce your organisation's carbon footprint. It describes: the benefits of cloud computing; how to choose the right supplier and technologies for your particular business; key security issues and the perils and pitfalls to avoid. This Quick Start Guide puts business needs before technology, enabling you to make confident decisions about IT strategy, make the right choices for your business and reject 'solutions' that fix problems you don't have.

' Written by the founders of the new and expanding field of numerical algebraic geometry, this is the first book that uses an algebraic-geometric approach to the numerical solution of polynomial systems and also the first one to treat numerical methods for finding positive dimensional solution sets. The text covers the full theory from methods developed for isolated solutions in the 1980's to the most recent research on positive dimensional sets. Contents:Background:Polynomial SystemsHomotopy ContinuationProjective SpacesGenericity and Probability OnePolynomials of One VariableOther MethodsIsolated Solutions:Coefficient-Parameter HomotopyPolynomial StructuresCase StudiesEndpoint EstimationChecking Results and Other Implementation TipsPositive Dimensional Solutions:Basic Algebraic GeometryBasic Numerical Algebraic GeometryA Cascade Algorithm for Witness SupersetsThe Numerical Irreducible DecompositionThe Intersection of Algebraic SetsAppendices:Algebraic GeometrySoftware for Polynomial ContinuationHomLab User's Guide Readership: Graduate students and researchers in applied mathematics and mechanical engineering. Keywords:Polynomial Systems;Numerical Methods;Homotopy Methods;Mechanical Engineering;Numerical Algebraic Geometry;Kinematics;RoboticsKey Features:Useful introduction to the field for graduate students and researchers in related areasIncludes exercises suitable for classroom use and self-studyIncludes Matlab software to illustrate the methodIncludes many graphical illustrationsIncludes a detailed summary of useful results from algebraic geometryReviews:"The text is written in a very smooth and intelligent form, yielding a readable book whose contents are accessible to a wide class of readers, even to undergraduate students, provided that they accept that some delicate points of some of the proofs could be omitted. Its readability and fast access to the core of the book makes it recommendable as a pleasant read."Mathematical Reviews "This is an excellent book on numerical solutions of polynomials systems for engineers, scientists and numerical analysts. As pioneers of the field of numerical algebraic geometry, the authors have provided a comprehensive summary of ideas, methods, problems of numerical algebraic geometry and applications to solving polynomial systems. Through the book readers will experience the authors' original ideas, contributions and their techniques in handling practical problems ... Many interesting examples from engineering and science have been used throughout the book. Also the exercises are well designed in line with the content, along with the algorithms, sample programs in Matlab and author's own software 'HOMLAB' for polynomial continuation. This is a remarkable book that I recommend to engineers, scientists, researchers, professionals and students, and particularly numerical analysts who will benefit from the rapid development of numerical algebraic geometry."Zentralblatt MATH '

Over 19,000 total pages ... Public Domain U.S. Government published manual: Numerous illustrations and matrices. Published in the 1990s and after 2000. TITLES and CONTENTS: ELECTRICAL SCIENCES - Contains the following manuals: Electrical Science, Vol 1 - Electrical Science, Vol 2 - Electrical Science, Vol 3 - Electrical Science, Vol 4 - Thermodynamics, Heat Transfer, And Fluid Flow, Vol 1 - Thermodynamics, Heat Transfer, And Fluid Flow, Vol 2 - Thermodynamics, Heat Transfer, And Fluid Flow, Vol 3 - Instrumentation And Control, Vol 1 - Instrumentation And Control, Vol 2 Mathematics, Vol 1 - Mathematics, Vol 2 - Chemistry, Vol 1 - Chemistry, Vol 2 - Engineering Symbology, Prints, And Drawings, Vol 1 - Engineering Symbology, Prints, And Drawings, Vol 2 - Material Science, Vol 1 - Material Science, Vol 2 - Mechanical Science, Vol 1 - Mechanical Science, Vol 2 - Nuclear Physics And Reactor Theory, Vol 1 - Nuclear Physics And Reactor Theory, Vol 2. CLASSICAL PHYSICS - The Classical Physics Fundamentals includes information on the units used to measure physical properties; vectors, and how they are used to show the net effect of various forces; Newton's Laws of motion, and how to

use these laws in force and motion applications; and the concepts of energy, work, and power, and how to measure and calculate the energy involved in various applications. * Scalar And Vector Quantities * Vector Identification * Vectors: Resultants And Components * Graphic Method Of Vector Addition * Component Addition Method * Analytical Method Of Vector Addition * Newton's Laws Of Motion * Momentum Principles * Force And Weight * Free-Body Diagrams * Force Equilibrium * Types Of Force * Energy And Work * Law Of Conservation Of Energy * Power – ELECTRICAL SCIENCE: The Electrical Science Fundamentals Handbook includes information on alternating current (AC) and direct current (DC) theory, circuits, motors, and generators; AC power and reactive components; batteries; AC and DC voltage regulators; transformers; and electrical test instruments and measuring devices. * Atom And Its Forces * Electrical Terminology * Units Of Electrical Measurement * Methods Of Producing Voltage (Electricity) * Magnetism * Magnetic Circuits * Electrical Symbols * DC Sources * DC Circuit Terminology * Basic DC Circuit Calculations * Voltage Polarity And Current Direction * Kirchhoff's Laws * DC Circuit Analysis * DC Circuit Faults * Inductance * Capacitance * Battery Terminology * Battery Theory * Battery Operations * Types Of Batteries * Battery Hazards * DC Equipment Terminology * DC Equipment Construction * DC Generator Theory * DC Generator Construction * DC Motor Theory * Types Of DC Motors * DC Motor Operation * AC Generation * AC Generation Analysis * Inductance * Capacitance * Impedance * Resonance * Power Triangle * Three-Phase Circuits * AC Generator Components * AC Generator Theory * AC Generator Operation * Voltage Regulators * AC Motor Theory * AC Motor Types * Transformer Theory * Transformer Types * Meter Movements * Voltmeters * Ammeters * Ohm Meters * Wattmeters * Other Electrical Measuring Devices * Test Equipment * System Components And Protection Devices * Circuit Breakers * Motor Controllers * Wiring Schemes And Grounding THERMODYNAMICS, HEAT TRANSFER AND FLUID FUNDAMENTALS. The Thermodynamics, Heat Transfer, and Fluid Flow Fundamentals Handbook includes information on thermodynamics and the properties of fluids; the three modes of heat transfer - conduction, convection, and radiation; and fluid flow, and the energy relationships in fluid systems. * Thermodynamic Properties * Temperature And Pressure Measurements * Energy, Work, And Heat * Thermodynamic Systems And Processes * Change Of Phase * Property Diagrams And Steam Tables * First Law Of Thermodynamics * Second Law Of Thermodynamics * Compression Processes * Heat Transfer Terminology * Conduction Heat Transfer * Convection Heat Transfer * Radiant Heat Transfer * Heat Exchangers * Boiling Heat Transfer * Heat Generation * Decay Heat * Continuity Equation * Laminar And Turbulent Flow * Bernoulli's Equation * Head Loss * Natural Circulation * Two-Phase Fluid Flow * Centrifugal Pumps INSTRUMENTATION AND CONTROL. The Instrumentation and Control Fundamentals Handbook includes information on temperature, pressure, flow, and level detection systems; position indication systems; process control systems; and radiation detection principles. * Resistance Temperature Detectors (Rtds) * Thermocouples * Functional Uses Of Temperature Detectors * Temperature Detection Circuitry * Pressure Detectors * Pressure Detector Functional Uses * Pressure Detection Circuitry * Level Detectors * Density Compensation * Level Detection Circuitry * Head Flow Meters * Other Flow Meters * Steam Flow Detection * Flow Circuitry * Synchro Equipment * Switches * Variable Output Devices * Position Indication Circuitry * Radiation Detection Terminology * Radiation Types * Gas-Filled Detector * Detector Voltage * Proportional Counter * Proportional Counter Circuitry * Ionization Chamber * Compensated Ion Chamber * Electroscopes * Ionization Chamber * Geiger-Müller Detector * Scintillation Counter * Gamma Spectroscopy * Miscellaneous Detectors * Circuitry And Circuit Elements * Source Range Nuclear Instrumentation * Intermediate Range Nuclear Instrumentation * Power Range Nuclear Instrumentation * Principles Of Control Systems * Control Loop Diagrams * Two Position Control Systems * Proportional Control Systems * Reset (Integral) Control Systems * Proportional Plus Reset Control Systems * Proportional Plus Rate Control Systems * Proportional-Integral-Derivative Control Systems * Controllers * Valve Actuators MATHEMATICS The Mathematics Fundamentals Handbook includes a review of introductory mathematics and the concepts and functional use of algebra, geometry, trigonometry, and calculus. Word problems, equations, calculations, and practical exercises that require the use of each of the mathematical concepts are also presented. * Calculator Operations * Four Basic Arithmetic Operations * Averages * Fractions * Decimals * Signed Numbers * Significant Digits * Percentages * Exponents * Scientific Notation * Radicals * Algebraic Laws * Linear Equations * Quadratic Equations * Simultaneous Equations * Word Problems * Graphing * Slopes * Interpolation And Extrapolation * Basic Concepts Of Geometry * Shapes And Figures Of Plane Geometry * Solid Geometric Figures * Pythagorean Theorem * Trigonometric Functions * Radians * Statistics * Imaginary And Complex Numbers * Matrices And Determinants * Calculus CHEMISTRY The Chemistry Handbook includes information on the atomic structure of matter; chemical bonding; chemical equations; chemical interactions involved with corrosion processes; water chemistry control, including the principles of water treatment; the hazards of chemicals and gases, and basic gaseous diffusion processes. * Characteristics Of Atoms * The Periodic Table * Chemical Bonding * Chemical Equations * Acids, Bases, Salts, And Ph * Converters * Corrosion Theory * General Corrosion * Crud And Galvanic Corrosion * Specialized Corrosion * Effects Of Radiation On Water Chemistry (Synthesis) * Chemistry Parameters * Purpose Of Water Treatment * Water Treatment Processes * Dissolved Gases, Suspended Solids, And Ph Control * Water Purity * Corrosives (Acids And Alkalies) * Toxic Compound * Compressed Gases * Flammable And Combustible Liquids ENGINEERING SYMBOLOGY. The Engineering Symbology, Prints, and Drawings Handbook includes information on engineering fluid drawings and prints; piping and instrument drawings; major symbols and conventions; electronic diagrams and schematics; logic circuits and diagrams; and fabrication, construction, and architectural drawings. * Introduction To Print Reading * Introduction To The Types Of Drawings, Views, And Perspectives * Engineering Fluids Diagrams And Prints * Reading Engineering P&IDs * P&ID Print Reading Example * Fluid Power P&IDs * Electrical Diagrams And Schematics * Electrical Wiring And Schematic Diagram Reading Examples * Electronic Diagrams And Schematics * Examples * Engineering Logic Diagrams * Truth Tables And Exercises * Engineering Fabrication, Construction, And Architectural Drawings * Engineering Fabrication, Construction, And Architectural Drawing, Examples MATERIAL SCIENCE. The Material Science Handbook includes information on the structure and properties of metals, stress mechanisms in metals, failure modes, and the characteristics of metals that are commonly used in DOE nuclear facilities. * Bonding * Common Lattice Types * Grain Structure And Boundary * Polymorphism * Alloys * Imperfections In Metals * Stress * Strain * Young's Modulus * Stress-Strain Relationship * Physical Properties * Working Of Metals * Corrosion * Hydrogen Embrittlement * Tritium/Material Compatibility * Thermal Stress * Pressurized Thermal Shock * Brittle Fracture Mechanism * Minimum Pressurization-Temperature Curves * Heatup And Cooldown Rate Limits * Properties Considered * When Selecting Materials * Fuel Materials * Cladding And Reflectors * Control Materials * Shielding Materials * Nuclear Reactor Core Problems * Plant Material Problems * Atomic Displacement Due To Irradiation * Thermal And Displacement Spikes * Due To Irradiation * Effect Due To Neutron Capture * Radiation Effects In Organic Compounds * Reactor Use Of Aluminum MECHANICAL SCIENCE. The Mechanical Science Handbook includes information on diesel engines, heat exchangers, pumps, valves, and miscellaneous mechanical components. * Diesel Engines * Fundamentals Of The Diesel Cycle * Diesel Engine Speed, Fuel Controls, And Protection * Types Of Heat Exchangers * Heat Exchanger Applications * Centrifugal Pumps * Centrifugal Pump Operation * Positive Displacement Pumps * Valve Functions And Basic Parts * Types Of Valves * Valve Actuators * Air Compressors * Hydraulics * Boilers * Cooling Towers * Demineralizers * Pressurizers * Steam Traps * Filters And Strainers NUCLEAR PHYSICS AND REACTOR THEORY. The Nuclear Physics and Reactor Theory Handbook includes information on atomic and nuclear physics; neutron characteristics; reactor theory and nuclear parameters; and the theory of reactor operation. * Atomic Nature Of Matter * Chart Of The Nuclides * Mass Defect And Binding Energy * Modes Of Radioactive Decay * Radioactivity * Neutron Interactions * Nuclear Fission * Energy Release From Fission * Interaction Of Radiation With Matter * Neutron Sources * Nuclear Cross Sections And Neutron Flux * Reaction Rates * Neutron Moderation * Prompt And Delayed Neutrons * Neutron Flux Spectrum * Neutron Life Cycle * Reactivity * Reactivity Coefficients * Neutron Poisons * Xenon * Samarium And Other Fission Product Poisons * Control Rods * Subcritical Multiplication * Reactor Kinetics * Reactor

Many organizations require continuous operation of their mission-critical, IBM® FileNet P8® systems after a failure has occurred. Loss of system resources and services as a result of any failure can translate directly into lost customers and lost revenue. The goal, therefore, is to design and implement a FileNet P8 system that ensures continuous operation even after a failure happens. This IBM Redbooks® publication focuses on FileNet P8 Version 4.5.1 systems disaster recovery. The book covers strategies, preparation levels, site sizing, data replication, testing, and what to do during a disaster. Backup and restore planning is a critical aspect of a disaster recovery strategy. We discuss backup types and strategies. We also discuss alternative strategies such as rolling storage policies and IBM FlashCopy® capability. With the help of use cases and our lab testing environment, the book provides guidelines for setting up a FileNet P8 production environment and a standby FileNet P8 disaster recovery system. This book is intended for IT architects, IT specialists, project managers, and decision makers, who must identify the best disaster recovery strategies and integrate them into the FileNet P8 system design process.

Contains case studies from engineering and operations research Includes commented literature for each chapter

"This book provides a discussion of the managerial aspects, solutions and case studies related to e-business, disseminating current achievements and practical solutions and applications"--Provided by publisher.

The 18th European Symposium on Computer Aided Process Engineering contains papers presented at the 18th European Symposium of Computer Aided Process Engineering (ESCAPE 18) held in Lyon, France, from 1-4 June 2008. The ESCAPE series brings the latest innovations and achievements by leading professionals from the industrial and academic communities. The series serves as a forum for engineers, scientists, researchers, managers and students from academia and industry to: - present new computer aided methods, algorithms, techniques related to process and product engineering, - discuss innovative concepts, new challenges, needs and trends in the area of CAPE. This research area bridges fundamental sciences (physics, chemistry, thermodynamics, applied mathematics and computer sciences) with the various aspects of process and product engineering. The special theme for ESCAPE-18 is CAPE for the Users! CAPE systems are to be put in the hands of end users who need functionality and assistance beyond the scientific and technological capacities which are at the core of the systems. The four main topics are: - off-line systems for synthesis and design, - on-line systems for control and operation, - computational and numerical solutions strategies, - integrated and multi-scale modelling and simulation, Two general topics address the impact of CAPE tools and methods on Society and Education. * CD-ROM that accompanies the book contains all research papers and contributions * International in scope with guest speeches and keynote talks from leaders in science and industry * Presents papers covering the latest research, key top areas and developments in Computer Aided Process Engineering

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The European Conference on e-Government has been running now for 18 years. This event has been held in Italy, Ireland, Belgium, UK, Slovenia, to mention a few of the countries who have hosted it. This year we are refocusing the conference to look more broadly at the area of Digital Government. The conference is generally attended by participants from more than 40 countries and attracts an interesting combination of academic scholars, public sector workers and individuals who are engaged in various aspects of Digital Government research and application.

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