K D Joshi Introduction To General Topology

Computer VisionAn Illustrated Introduction to Topology and HomotopyAn Introduction to Surface Analysis by XPS and AESIntroduction to TopologyLinear Operators and Approximation TheoryBasic Algebraic TopologyFoundations of Discrete MathematicsHandbook on Knowledge Management 1High-Pressure Science and TechnologyTheory and Practice of Business Intelligence in HealthcareMetric SpacesAn Introduction to Measure and IntegrationFoundations of Discrete MathematicsFarmers and Plant BreedingHandbook of Toxicology of Chemical Warfare AgentsVitamin D and Human HealthOrdinary Differential EquationsProceedings of International Conference on Recent Advancement on Computer and CommunicationEducative JEE MathematicsDisease Control Priorities, Third Edition (Volume 5)Applied Discrete StructuresMeasure theory and IntegrationThe Healthcare Quality BookCalculus for Scientists and EngineersMEGMetric Spaces and Complex AnalysisInformation and Communication Technology for Intelligent SystemsRandomized AlgorithmsAn Introduction to CloudsAdvances in LimnologyTheory of Functions of a Complex VariableIntroduction to General TopologyPattern Recognition and Machine LearningVedic PhysicsGeneral TopologyEducative JEE MathematicsIndian Books in PrintTopology of Metric SpacesAn Introduction to Differential GeometrySetting a New Agenda for Student Engagement and Retention

in Historically Black Colleges and Universities

Computer Vision

"Topology of Metric Spaces gives a very streamlined development of a course in metric space topology emphasizing only the most useful concepts, concrete spaces and geometric ideas to encourage geometric thinking, to treat this as a preparatory ground for a general topology course, to use this course as a surrogate for real analysis and to help the students gain some perspective of modern analysis." "Eminently suitable for self-study, this book may also be used as a supplementary text for courses in general (or point-set) topology so that students will acquire a lot of concrete examples of spaces and maps."--BOOK JACKET.

An Illustrated Introduction to Topology and Homotopy

An Introduction to Surface Analysis by XPS and AES

An Illustrated Introduction to Topology and Homotopy explores the beauty of topology and homotopy theory in a direct and engaging manner while illustrating the power of the theory through many, often surprising, applications. This self-contained book takes a visual and rigorous approach that incorporates both extensive illustrations and full proofs

Introduction to Topology

Cardiovascular, respiratory, and related conditions cause more than 40 percent of all deaths globally, and their substantial burden is rising, particularly in low- and middle-income countries (LMICs). Their burden extends well beyond health effects to include significant economic and societal consequences. Most of these conditions are related, share risk factors, and have common control measures at the clinical, population, and policy levels. Lives can be extended and improved when these diseases are prevented, detected, and managed. This volume summarizes current knowledge and presents evidence-based interventions that are effective, cost-effective, and scalable in LMICs.

Linear Operators and Approximation Theory

This is the first textbook on pattern recognition to present the Bayesian viewpoint. The book presents approximate inference algorithms that permit fast approximate answers in situations where exact answers are not feasible. It uses graphical models to describe probability distributions when no other books apply graphical models to machine learning. No previous knowledge of pattern recognition or machine learning concepts is assumed. Familiarity with multivariate calculus and basic linear algebra is required, and some experience in the use of probabilities would be helpful though not essential as the book includes a self-contained introduction to

Page 3/26

basic probability theory.

Basic Algebraic Topology

"This book introduces data mining, modeling, and analytic techniques to health and healthcare data; articulates the value of big volumes of data to health and healthcare; evaluates business intelligence tools; and explores business intelligence use and applications in healthcare"

Foundations of Discrete Mathematics

Though ordinary differential equations is taught as a core course to students in mathematics and applied mathematics, detailed coverage of the topics with sufficient examples is unique. Written by a mathematics professor and intended as a textbook for third- and fourth-year undergraduates, the five chapters of this publication give a precise account of higher order differential equations, power series solutions, special functions, existence and uniqueness of solutions, and systems of linear equations. Relevant motivation for different concepts in each chapter and discussion of theory and problems-without the omission of steps-sets Ordinary Differential Equations: A First Course apart from other texts on ODEs. Full of distinguishing examples and containing exercises at the end of each chapter, this lucid course book will promote self-study among students.

Handbook on Knowledge Management 1

As healthcare reform continues to transform US healthcare delivery and processes, one thing remains the same: the importance of quality. This book brings together a team of internationally prominent contributors who provide expertise on current strategies, tactics, and methods for understanding quality in a comprehensive way. The book provides a solid foundation on the components and importance of quality, while incorporating techniques to continuously improve and transform a healthcare system. This comprehensive textbook is suited for undergraduate and graduate courses in healthcare administration as well as business, nursing, allied health, pharmacy, and medicine programs. Study questions in each chapter facilitate additional discussion

High-Pressure Science and Technology

This groundbreaking book covers every aspect of deadly toxic chemicals used as weapons of mass destruction and employed in conflicts, warfare and terrorism. Including findings from experimental as well as clinical studies, this one-of-a-kind handbook is prepared in a very user- friendly format that can easily be followed by students, teachers and researchers, as well as lay people. Stand-alone chapters on individual chemicals and major topics allow the reader to easily access required information without searching through the entire book. This is the first book that offers in-depth coverage of individual toxicants, target organ toxicity, major incidents, toxic effects in humans, animals and wildlife, biosensors,

biomarkers, on-site and laboratory analytical methods, decontamination and detoxification procedures, prophylactic, therapeutic and countermeasures, and the role of homeland security. Presents a comprehensive look at all aspects of chemical warfare toxicology in one reference work. This saves researchers time in quickly accessing the very latest definitive details on toxicity of specific agents used in chemical warfare as opposed to searching through thousands of journal articles. Will include the most agent-specific information on the market Includes detailed coverage of the most exhaustive list of agents possibly used as chemical warfare agents in one source. Section 4: Agents That Can Be Used as Weapons of Mass Destruction ? 25 chapters long. Other books on the market only include a sample selection of specific agents. Offering all possible agents detailed under one cover makes this appealing to a wider audience and saves researchers time The Forward will be written by Dr. Tetsuo Satoh, Chiba University, Japan. He is one of the most respected, recognizable authorities on chemical warfare agents which will set the authoritative tone for the book Covers risk to humans, animals and the environment equally. Researchers involved in assessing the risks involved with a possible chemical warfare attack and those who are developing response plans to such attacks must look at not only the risks to human health but to our wildlife and environment as well. The holistic approach taken in this book ensures that the researchers have ready access to the details no matter which aspect of the effects of CWA's they might be concerned with

Theory and Practice of Business Intelligence in Healthcare

Computer Vision: Algorithms and Applications explores the variety of techniques commonly used to analyze and interpret images. It also describes challenging real-world applications where vision is being successfully used, both for specialized applications such as medical imaging, and for fun, consumer-level tasks such as image editing and stitching, which students can apply to their own personal photos and videos. More than just a source of "recipes," this exceptionally authoritative and comprehensive textbook/reference also takes a scientific approach to basic vision problems, formulating physical models of the imaging process before inverting them to produce descriptions of a scene. These problems are also analyzed using statistical models and solved using rigorous engineering techniques. Topics and features: structured to support active curricula and project-oriented courses, with tips in the Introduction for using the book in a variety of customized courses; presents exercises at the end of each chapter with a heavy emphasis on testing algorithms and containing numerous suggestions for small mid-term projects; provides additional material and more detailed mathematical topics in the Appendices, which cover linear algebra, numerical techniques, and Bayesian estimation theory; suggests additional reading at the end of each chapter, including the latest research in each sub-field, in addition to a full Bibliography at the end of the book; supplies supplementary course

material for students at the associated website, http://szeliski.org/Book/. Suitable for an upper-level undergraduate or graduate-level course in computer science or engineering, this textbook focuses on basic techniques that work under real-world conditions and encourages students to push their creative boundaries. Its design and exposition also make it eminently suitable as a unique reference to the fundamental techniques and current research literature in computer vision.

Metric Spaces

An Introduction to Measure and Integration

Magnetoencephalography (MEG) is an exciting brain imaging technology that allows real-time tracking of neural activity, making it an invaluable tool for advancing our understanding of brain function. In this comprehensive introduction to MEG, Peter Hansen, Morten Kringelbach, and Riitta Salmelin have brought together the leading researchers to provide the basic tools for planning and executing MEG experiments, as well as analyzing and interpreting the resulting data. Chapters on the basics describe the fundamentals of MEG and its instrumentation, and provide guidelines for designing experiments and performing successful measurements. Chapters on data analysis present it in detail, from general concepts and assumptions to analysis of evoked responses and oscillatory background activity. Chapters on solutions propose

potential solutions to the inverse problem using techniques such as minimum norm estimates, spatial filters and beamformers. Chapters on combinations elucidate how MEG can be used to complement other neuroimaging techniques. Chapters on applications provide practical examples of how to use MEG to study sensory processing and cognitive tasks, and how MEG can be used in a clinical setting. These chapters form a complete basic reference source for those interested in exploring or already using MEG that will hopefully inspire them to try to develop new, exciting approaches to designing and analyzing their own studies. This book will be a valuable resource for researchers from diverse fields, including neuroimaging, cognitive neuroscience, medical imaging, computer modelling, as well as for clinical practitioners.

Foundations of Discrete Mathematics

Farmers and Plant Breeding

This book is a printed edition of the Special Issue "Vitamin D and Human Health" that was published in Nutrients

Handbook of Toxicology of Chemical Warfare Agents

This Book Is Meant To Be More Than Just A Text In Discrete Mathematics. It Is A Forerunner Of Another Book Applied Discrete Structures By The Same

Author. The Ultimate Goal Of The Two Books Are To Make A Strong Case For The Inclusion Of Discrete Mathematics In The Undergraduate Curricula Of Mathematics By Creating A Sequence Of Courses In Discrete Mathematics Parallel To The Traditional Sequence Of Calculus-Based Courses.The Present Book Covers The Foundations Of Discrete Mathematics In Seven Chapters. It Lays A Heavy Emphasis On Motivation And Attempts Clarity Without Sacrificing Rigour. A List Of Typical Problems Is Given In The First Chapter. These Problems Are Used Throughout The Book To Motivate Various Concepts. A Review Of Logic Is Included To Gear The Reader Into A Proper Frame Of Mind. The Basic Counting Techniques Are Covered In Chapters 2 And 7. Those In Chapter 2 Are Elementary. But They Are Intentionally Covered In A Formal Manner So As To Acquaint The Reader With The Traditional Definition-Theorem-Proof Pattern Of Mathematics. Chapters 3 Introduces Abstraction And Shows How The Focal Point Of Todays Mathematics Is Not Numbers But Sets Carrying Suitable Structures. Chapter 4 Deals With Boolean Algebras And Their Applications. Chapters 5 And 6 Deal With More Traditional Topics In Algebra, Viz., Groups, Rings, Fields, Vector Spaces And Matrices.The Presentation Is Elementary And Presupposes No Mathematical Maturity On The Part Of The Reader. Instead, Comments Are Inserted Liberally To Increase His Maturity. Each Chapter Has Four Sections. Each Section Is Followed By Exercises (Of Various Degrees Of Difficulty) And By Notes And Guide To Literature. Answers To The Exercises Are Provided At The End Of The Book.

Vitamin D and Human Health

This text approaches integration via measure theory as opposed to measure theory via integration, an approach which makes it easier to grasp the subject. Apart from its central importance to pure mathematics, the material is also relevant to applied mathematics and probability, with proof of the mathematics set out clearly and in considerable detail. Numerous worked examples necessary for teaching and learning at undergraduate level constitute a strong feature of the book, and after studying statements of results of the theorems, students should be able to attempt the 300 problem exercises which test comprehension and for which detailed solutions are provided. Approaches integration via measure theory, as opposed to measure theory via integration, making it easier to understand the subject Includes numerous worked examples necessary for teaching and learning at undergraduate level Detailed solutions are provided for the 300 problem exercises which test comprehension of the theorems provided

Ordinary Differential Equations

Although difficult to comprehend in the first reading, both to the people in the east and west trained in the modern methods of learning, this book leaves an undeliable marks and impressions that linger and recycle in the mind suggesting that there is something unique and novel that needs to be pursued. The book lays down an alternative original

framework and template for enquiry of human mind. The framework is generic based on the Sankhya philosophy and school of thought. It elaborates on the fundamental notions such as (Prakriti, Mahat, Ahankar, Rita and Satya, Bramha and Prajapatis, the universe creation, sphota, tanmatras, panch mahabhutas, purush, yagna, kala, pralaya etc) and endeavours sometimes unnecessarily labours to link them to what we butk now in modern physics. In its own right, the framework is sufficiently exciting to be pursued to eventful conclusion. The framework is far more than encompassing the physics alone. Modern physics, as we understand, deals with matter, at all locations, and in all its aspects including its state, composition, characterization, properties such as magnetic, electric etc, energy states levels and forms, evolution and transformation, motion and dynamics interactions and force fields and so on so forth. The basic settings, as assumed and occasionally verified, allow to sometimes build exacting relationships between cause and effect, while for some others the relationships are at best approximate and for yet others the situations could even be paradoxical. Conventional approach understands this as events occur at all possible length and time scales and according as their importance contributes to the net outcome. Integrating the chain of such events together spanning a range of scales as wide as 10-12 to 1012 has always been a problem. The curse of dimensionality and presence of nonlinearity may as well be the creation of our own basic premises and perception. The question is: Can the alternative approach propounded here pave the way? If so-how does one quantify the causal relation and

predictability? Shri. K. D. Verma, the author, has laid down the foundations using an unobstructing and free flowing language. I am sure this will excite the nascent minds to take it further. The type set is free of trivial errors and the book-even, if not understood clearly by all uninitiated person like me, is certainly a pleasure to read. It compels one to continue to think. Dr. B D Kulkarni, Director, National Chemical Laboratory, Pune.

Proceedings of International Conference on Recent Advancement on Computer and Communication

This Book Is Meant To Be More Than Just A Text In Discrete Mathematics. It Is A Forerunner Of Another Book Applied Discrete Structures By The Same Author. The Ultimate Goal Of The Two Books Are To Make A Strong Case For The Inclusion Of Discrete Mathematics In The Undergraduate Curricula Of Mathematics By Creating A Sequence Of Courses In Discrete Mathematics Parallel To The Traditional Sequence Of Calculus-Based Courses.The Present Book Covers The Foundations Of Discrete Mathematics In Seven Chapters. It Lays A Heavy Emphasis On Motivation And Attempts Clarity Without Sacrificing Rigour. A List Of Typical Problems Is Given In The First Chapter. These Problems Are Used Throughout The Book To Motivate Various Concepts. A Review Of Logic Is Included To Gear The Reader Into A Proper Frame Of Mind. The Basic Counting Techniques Are Covered In Chapters 2 And 7. Those In Chapter 2 Are Elementary. But They Are Intentionally Covered In

A Formal Manner So As To Acquaint The Reader With The Traditional Definition-Theorem-Proof Pattern Of Mathematics. Chapters 3 Introduces Abstraction And Shows How The Focal Point Of Todays Mathematics Is Not Numbers But Sets Carrying Suitable Structures. Chapter 4 Deals With Boolean Algebras And Their Applications. Chapters 5 And 6 Deal With More Traditional Topics In Algebra, Viz., Groups, Rings, Fields, Vector Spaces And Matrices.The Presentation Is Elementary And Presupposes No Mathematical Maturity On The Part Of The Reader. Instead, Comments Are Inserted Liberally To Increase His Maturity. Each Chapter Has Four Sections. Each Section Is Followed By Exercises (Of Various Degrees Of Difficulty) And By Notes And Guide To Literature. Answers To The Exercises Are Provided At The End Of The Book.

Educative JEE Mathematics

Concise undergraduate introduction to fundamentals of topology — clearly and engagingly written, and filled with stimulating, imaginative exercises. Topics include set theory, metric and topological spaces, connectedness, and compactness. 1975 edition.

Disease Control Priorities, Third Edition (Volume 5)

Although This Book Is Intended As A Sequel To Foundations Of Discrete Mathematics By The Same Author, It Can Be Read Independently Of The Latter, As The Relevant Background Needed Has Been

Reviewed In Chapter 1. The Subsequent Chapters Deal With Graph Theory (With Applications), Analysis Of Algorithms (With A Detailed Study Of A Few Sorting Algorithms And A Discussion Of Tractability), Linear Programming (With Applications, Variations, Karmarkars Polynomial Time Algorithm, Integer And Quadratic Programming), Applications Of Algebra (To Polyas Theory Of Counting, Galois Theory, Coding Theory Of Designs). A Chapter On Matroids Familiarises The Reader With This Relatively New Branch Of Discrete Mathematics.Even Though Some Of The Topics Are Relatively Advanced, An Attempt Has Been Made To Keep The Style Elementary, So That A Sincere Student Can Read The Book On His Own. A Large Number Of Comments, Exercises, And References Is Included To Broaden The Readers Scope Of Vision. A Detailed Index Is Provided For Easy Reference.

Applied Discrete Structures

This book presents the history of, and current approaches to, farmer-breeder collaboration in plant breeding, situating this work in the context of sustainable food systems, as well as national and international policy and law regimes. Plant breeding is essential to food production, climate-change adaptation and sustainable development. This book brings together experienced practitioners and researchers involved in collaborative breeding programmes across a diversity of crops and agro-ecologies around the world. Case studies include collaborative sorghum and pearl millet breeding for

water-stressed environments in West Africa, participatory rice breeding for intensive rice farming in the Mekong Delta, and evolutionary participatory quinoa breeding for organic agriculture in North America. While outlining the challenges, the volume also highlights the positive impacts, such as yield increases, farmers' empowerment in the innovation and development processes, contributions to maintenance of crop genetic diversity and adaptation to climate change. This collection offers a range of perspectives on enabling conditions for farmer–breeder collaboration in plant breeding in relation to biodiversity agreements such as the Plant Treaty, trade agreements and related intellectual property rights (IPR) regimes, and national seed policies and laws. Relevant to a wide audience, including practitioners with experience in plant breeding and management of crop genetic resources and those with a broader interest in agriculture and development, as well as students of international cooperation and development, this volume is a timely addition to the literature.

Measure theory and Integration

As more Americans are attending college, historically black colleges and universities (HBCUs) are now in a position where they must directly compete with other institutions. While other colleges and universities might have more resources and stronger infrastructures, HBCUs provide better opportunities to meet the needs of students of color. Setting a New Agenda for Student Engagement and Retention in

Historically Black Colleges and Universities explores the innovations that HBCUs can enact to better serve and prepare the next generation of African American leaders, and to be more competitive in the higher education landscape. As students need different forms of support throughout their academic career, it becomes necessary to engage them through mentorship, programming, and classroom management. This book is a valuable resource for educators and administration at HBCUs, sociologists, policy makers, and students studying education science and administration.

The Healthcare Quality Book

Building on rudimentary knowledge of real analysis, point-set topology, and basic algebra, Basic Algebraic Topology provides plenty of material for a two-semester course in algebraic topology. The book first introduces the necessary fundamental concepts, such as relative homotopy, fibrations and cofibrations, category theory, cell complexes, and simplicial complexes. It then focuses on the fundamental group, covering spaces and elementary aspects of homology theory. It presents the central objects of study in topology visualization: manifolds. After developing the homology theory with coefficients, homology of the products, and cohomology algebra, the book returns to the study of manifolds, discussing Poincaré duality and the De Rham theorem. A brief introduction to cohomology of sheaves and Čech cohomology follows. The core of the text covers higher homotopy groups, Hurewicz's isomorphism theorem, obstruction theory,

Eilenberg-Mac Lane spaces, and Moore-Postnikov decomposition. The author then relates the homology of the total space of a fibration to that of the base and the fiber, with applications to characteristic classes and vector bundles. The book concludes with the basic theory of spectral sequences and several applications, including Serre's seminal work on higher homotopy groups. Thoroughly classroom-tested, this self-contained text takes students all the way to becoming algebraic topologists. Historical remarks throughout the text make the subject more meaningful to students. Also suitable for researchers, the book provides references for further reading, presents full proofs of all results, and includes numerous exercises of varying levels.

Calculus for Scientists and Engineers

Theory of Functions of a Complex Variable

MEG

Metric Spaces and Complex Analysis

For many applications a randomized algorithm is either the simplest algorithm available, or the fastest, or both. This tutorial presents the basic concepts in the design and analysis of randomized algorithms. The first part of the book presents tools from probability theory and probabilistic analysis that are recurrent in algorithmic applications. Algorithmic examples are given to illustrate the use of each tool

in a concrete setting. In the second part of the book, each of the seven chapters focuses on one important area of application of randomized algorithms: data structures; geometric algorithms; graph algorithms; number theory; enumeration; parallel algorithms; and on-line algorithms. A comprehensive and representative selection of the algorithms in these areas is also given. This book should prove invaluable as a reference for researchers and professional programmers, as well as for students.

Information and Communication Technology for Intelligent Systems

An Introduction to Clouds provides a fundamental understanding of clouds, ranging from cloud microphysics to the large-scale impacts of clouds on climate. On the microscale, phase changes and ice nucleation are covered comprehensively, including aerosol particles and thermodynamics relevant for the formation of clouds and precipitation. At larger scales, cloud dynamics, mid-latitude storms and tropical cyclones are discussed leading to the role of clouds on the hydrological cycle and climate. Each chapter ends with problem sets and multiple-choice questions that can be completed online, and important equations are highlighted in boxes for ease of reference. Combining mathematical formulations with qualitative explanations of underlying concepts, this accessible book requires relatively little previous knowledge, making it ideal for advanced undergraduate and graduate students in atmospheric science, environmental sciences and related

disciplines.

Randomized Algorithms

An Introduction to Clouds

Among the best available reference introductions to general topology, this volume is appropriate for advanced undergraduate and beginning graduate students. Includes historical notes and over 340 detailed exercises. 1970 edition. Includes 27 figures.

Advances in Limnology

As the most comprehensive reference work dealing with knowledge management (KM), this work, consisting of 2 volumes, is essential for the library of every KM practitioner, researcher, and educator. Written by an international array of KM luminaries, its approx. 60 chapters approach knowledge management from a wide variety of perspectives ranging from classic foundations to cutting-edge thought, informative to provocative, theoretical to practical, historical to futuristic, human to technological, and operational to strategic. Novices and experts alike will refer to the authoritative and stimulating content again and again for years to come.

Theory of Functions of a Complex Variable

Introduction to General Topology

Pattern Recognition and Machine Learning

Provides a concise yet comprehensive introduction to XPS and AES techniques in surface analysis This accessible second edition of the bestselling book, An Introduction to Surface Analysis by XPS and AES, 2nd Edition explores the basic principles and applications of X-ray Photoelectron Spectroscopy (XPS) and Auger Electron Spectroscopy (AES) techniques. It starts with an examination of the basic concepts of electron spectroscopy and electron spectrometer design, followed by a qualitative and quantitative interpretation of the electron spectrum. Chapters examine recent innovations in instrument design and key applications in metallurgy, biomaterials, and electronics. Practical and concise, it includes compositional depth profiling; multi-technique analysis; and everything about samples—including their handling, preparation, stability, and more. Topics discussed in more depth include peak fitting, energy loss background analysis, multi-technique analysis, and multi-technique profiling. The book finishes with chapters on applications of electron spectroscopy in materials science and the comparison of XPS and AES with other analytical techniques. Extensively revised and updated with new material on NAPXPS, twin anode monochromators, gas cluster ion sources, valence band spectra, hydrogen detection, and quantification Explores key spectroscopic techniques

in surface analysis Provides descriptions of latest instruments and techniques Includes a detailed glossary of key surface analysis terms Features an extensive bibliography of key references and additional reading Uses a non-theoretical style to appeal to industrial surface analysis sectors An Introduction to Surface Analysis by XPS and AES, 2nd Edition is an excellent introductory text for undergraduates, first-year postgraduates, and industrial users of XPS and AES.

Vedic Physics

This book is a nonconventional text laying emphasis on the WHY's of mathematics rather that the HOW's. It covers the study of functions of a real variable with the attempt of motivating students about the abstract concepts thereby helping overcome their aversion for abstraction.

General Topology

This text employs vector methods to explore the classical theory of curves and surfaces. Topics include basic theory of tensor algebra, tensor calculus, calculus of differential forms, and elements of Riemannian geometry. 1959 edition.

Educative JEE Mathematics

Indian Books in Print

The book is a compilation of best papers presented at International Conference on Recent Advancement in Computer and Communication (ICRAC 2017) organized by IMPLab Research and Innovation Foundation, Bhopal, India. The book covers all aspects of computers and communication techniques including pervasive computing, distributed computing, cloud computing, sensor and adhoc network, image, text and speech processing, pattern recognition and pattern analysis, digital signal processing, digital electronics, telecommunication technologies, robotics, VLSI technologies, embedded system, satellite communication, digital signal processing, and digital communication. The papers included are original research works of experts from industry, government centers and academic institutions; experienced in engineering, design and research.

Topology of Metric Spaces

Since the last century, the postulational method and an abstract point of view have played a vital role in the development of modern mathematics. The experience gained from the earlier concrete studies of analysis point to the importance of passage to the limit. The basis of this operation is the notion of distance between any two points of the line or the complex plane. The algebraic properties of underlying sets often play no role in the development of analysis; this situation naturally leads to the study of metric spaces. The abstraction not only simplifies and elucidates mathematical ideas that recur in different

guises, but also helps eco- mize the intellectual effort involved in learning them. However, such an abstract approach is likely to overlook the special features of particular mathematical developments, especially those not taken into account while forming the larger picture. Hence, the study of particular mathematical developments is hard to overemphasize. The language in which a large body of ideas and results of functional analysis are expressed is that of metric spaces. The books on functional analysis seem to go over the preliminaries of this topic far too quickly. The present authors attempt to provide a leisurely approach to the theory of metric spaces. In order to ensure that the ideas take root gradually but firmly, a large number of examples and counterexamples follow each definition. Also included are several worked examples and exercises. Applications of the theory are spread out over the entire book.

An Introduction to Differential Geometry

The book gathers papers addressing state-of-the-art research in all areas of Information and Communication Technologies and their applications in intelligent computing, cloud storage, data mining and software analysis. It presents the outcomes of the third International Conference on Information and Communication Technology for Intelligent Systems, which was held on April 6–7, 2018, in Ahmedabad, India. Divided into two volumes, the book discusses the fundamentals of various data analytics and algorithms, making it a valuable resource for researchers' future studies.

Setting a New Agenda for Student Engagement and Retention in Historically Black Colleges and Universities

High pressure has become a basic variable in many areas of science and engineering. It extends from disciplines of geophysics and astrophysics through chemistry and physics to those of modern biology, electrical and chemical engineering. This breadth has been recognized for some time, but it was not until the early 1960's that an international group of scientists and engineers established the Association Internationale for Research and Advancement of High Pressure Science and Technology (AIRAPT) for bringing these various aspects of high pressure together at an international conference. The First AIRAPT International High Pressure Conference was held in 1965 in France and has been convened at approximately two to three year intervals since that time. The past four AIRAPT International High Pressure Conferences have been held in Germany, Scotland, Japan and the U.S.S.R. Since the first meeting of this kind, our understanding of high pressure behavior of physical systems has increased greatly.

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION