Mole Concept Theory Notesslibforme

This textbook on homology and cohomology theory is geared towards the beginning graduate student. Singular homology theory is developed systematically, avoiding all unnecessary definitions, terminology, and technical machinery. Wherever possible, the geometric motivation behind various algebraic concepts is emphasized. The only formal prerequisites are knowledge of the basic facts of abelian groups and point set topology. Singular Homology Theory is a continuation of t he author's earlier book, Algebraic Topology: An Introduction, which presents such important supplementary material as the theory of the fundamental group and a thorough discussion of 2-dimensional manifolds. However, this earlier book is not a prerequisite for understanding Singular Homology Theory.

In Psychology, Folklore, Creativity and the Human Dilemma, the author explores the meaning of folklore and its usefulness in education and psychotherapy. The author's interest has expanded into other fields that challenge and question the limits of our everyday horizons, namely, into operas, plays, and humor, as well as into new approaches to the meaning of human existence explored by modern thinkers. These various fields often interact, explain, and enrich each other. The book aims for deepening the awareness of our ultimate human concerns, the meaning of authenticity, and the urgent need for radical, long-term commitments. The present volume focuses almost entirely on the role of folklore in expanding and enriching a person's horizons, on the challenges by modern writers in terms of the need to radically alter the paradigm of Western society that has brought the blessings of technology, led to a fragmentation of our psyche, and threatens the very essence of our subjectivity. Throughout the book there is both the hidden and the overt implication that simply liking, appreciating or agreeing with insightful ideas and suggestions presented by anyone are absolutely worthless, or may even be counterproductive, if the readers do not translate into changes and actions the ideas that are most meaningful to them, and if they do not do so in their family, social, political and spiritual life.

Pediatric Urology has rapidly developed as a separate subspecialty in the last decade. During this time, significant advances in technology and instrumentation has meant that increasingly more procedures can be performed by the minimally invasive route. However, access to and availability of adequate training facilities and resources continues to hinder surgeons in achieving experience and expertise in the minimally invasive techniques in paediatric urology. Pediatric Endourology Techniques 2nd edition is a fully illustrated text with an accompanying web application which addresses these issues. The aim of this 2nd edition is to enable surgeons to carry out commonly performed minimally invasive pediatric urological procedures. This book has been organised systematically to enable quick reference to the topic of interest. It encompasses not only the majority of commonly performed pediatric endourological procedures in a standardised format but also newer techniques and procedures that have developed since publication of the first edition. A list of specific relevant reading material is given at the end of each chapter. Pediatric Endourology Techniques 2nd Edition is a valuable tool for pediatric urologists as well as pediatric surgeons, general surgeons, adult urologists and those with an interest in minimally invasive surgery.

The PROFESSIONAL REVIEW GUIDE FOR THE CCS EXAMINATION, 2013 EDITION, is an essential, effective preparation tool for the American Health Information Management Association (AHIMA) Certified Coding Specialist (CCS) exam. This comprehensive learning package includes a reader-friendly, content-rich text, now featuring online interactive quizzing, accessible via Printed Access Code bound into the front cover of the book. An available WebTutorTM supplement adds versatile online course management tools, including exam content, flashcards, course objectives, class notes, and discussion questions. Thorough and up-to-date, this invaluable guide covers critical information to help students pass the exam and prepare for professional success, including material on current code sets and AHIMA standards; recent changes to ICD-9-CM, CPT, ICD-10-CM, and ICD-10-PCS; electronic medical records; HIPAA requirements; and relevant laws, standards, and procedures. In addition to mock exams modeled closely to actual AHIMA exams, the guide includes study tips, coding case studies, quizzes and activities linked to AHIMA competencies to help students hone their skills by assigning codes to diagnoses and procedures for a variety of patient settings. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

This book describes clearly various research topics investigated for these 10 years in the Research Center of Advanced Structural and Functional Materials Design in Osaka University, Japan. Every chapter is aimed at understanding most advanced researches in materials science by describing its fundamentals and details as much as possible. Since both general explanations and cutting-edge commentaries are given for each topic in this book, it provides a lot of useful information for ordinary readers as well as materials scientists & engineers who wish to understand the future development in materials science fields of metals, alloys, ceramics, semiconductors etc. In particular, this book deals with special fusion area of structural and functional materials such as medical bone materials, of which contents are very unique features as materials science textbook.

Discover proven strategies for applying positive psychology within your coaching practice Written by Robert Biswas-Diener, a respected researcher, psychologist, life and organizational coach, and expert in positive psychology, Practicing Positive Psychology Coaching presents a wide range of practical interventions and tools you can put to use right away in your coaching practice. Each intervention is clearly outlined and, where appropriate, illustrated by case studies from organizational and life coaching. Providing unique assessments that can be used to evaluate client resources and goals, this practical guide introduces tools unique to this book that every professional can use in their practice, including: Findings from new research on goal commitment strategies, motivation, growth-mindset theory, and goal revision A decision tree for working specifically with Snyder's Hope Theory in the coaching context An easy-to-use assessment of "positive diagnosis," which measures client strengths, values, positive orientation toward the future, and satisfaction Measures of self-esteem, optimism, happiness, personal strengths, motivation, and creativity Guidance for leading clients through organizational and common life transitions including layoffs, leadership changes, university graduation, middle age, and retirement Filled with reflective exercises for use in your own personal and professional development, Practicing Positive Psychology Coaching also includes guidance and recommendations for marketing a positive psychology coaching practice.

Why is science hard to teach? What types of scientific investigation can you use in the primary classroom? Touching on current curriculum concerns and the wider challenges of developing high-quality science education, this book is an indispensable overview of important areas of teaching every aspiring primary school teacher needs to understand including: the role of science in the curriculum, communication and literacy in science teaching, science outside the classroom, transitional issues and assessment. Key features of this second edition include: • A new chapter on science in the Early Years • A new practical chapter on how to work scientifically • Master's-level 'critical reading' boxes in every chapter linking topics to relevant specialist literature • Expanded coverage of creativity, and link science to numeracy and computing This is essential reading for all students studying primary science on initial teacher education courses, including undergraduate (BEd, BA with QTS), postgraduate (PGCE, School Direct, SCITT), and also NQTs. Mick Dunne is Senior Lecturer in Science Education at Manchester Metropolitan University Alan Peacock is Honorary Research Fellow at the University of Exeter

Graham Richards gives historical perspective to key issues in contemporary psychology such as psychology and women and psychology and race as well as more traditional topics like behaviourism and Gestalt psychology. --From publisher's description. Significant recent advances in the imaging of the lower urinary tract are comprehensively presented in this handbook. It offers

information on both imaging examinations and interventional techniques with all the modern modalities, including MRI and ultrasound. The contributors are all experts in clinical urology; their varying and at times conflicting opinions track the fast-moving pace in the field and demonstrate the complexity of the subject. The approach is disease-oriented, though grouped by anatomic region. Each chapter covers etiology, physiology, pathology, epidemiology, clinical presentations and especially diagnostic imaging, but also the appropriate interventional radiologic techniques for both diagnosis and treatment.

An increased understanding of the developmental physiology, biochemistry, and molecular biology during early growth, maturation, ripening, and postharvest conditions has improved technologies to maintain the shelf life and quality of fruits, vegetables, and flowers. Postharvest Biology and Technology of Fruits, Vegetables, and Flowers provides a comprehensive introduction to this subject, offering a firm grounding in the basic science and branching out into the technology and practical applications. An authoritative resource on the science and technology of the postharvest sector, this book surveys the body of knowledge with an emphasis on the recent advances in the field.

This book brings together five topics on the application of Boolean functions. They are 1. Equivalence classes of Boolean functions: The number of n-variable functions is large, even for values as small as n = 6, and there has been much research on classifying functions. There are many classifications, each with their own distinct merit. 2. Boolean functions for cryptography: The process of encrypting/decrypting plaintext messages often depends on Boolean functions with specific properties. For example, highly nonlinear functions are valued because they are less susceptible to linear attacks. 3. Boolean differential calculus: An operation analogous to taking the derivative of a real-valued function offers important insight into the properties of Boolean functions. One can determine tests or susceptibility to hazards. 4. Reversible logic: Most logic functions are irreversible; it is impossible to reconstruct the input, given the output. However, Boolean functions that are reversible are necessary for quantum computing, and hold significant promise for low-power computing. 5. Data mining: The process of extracting subtle patterns from enormous amounts of data has benefited from the use of a graph-based representation of Boolean functions. This has use in surveillance, fraud detection, scientific discovery including bio-informatics, genetics, medicine, and education. Written by experts, these chapters present a tutorial view of new and emerging technologies in Boolean functions. Table of Contents: Equivalence Classes of Boolean Functions / Boolean Functions for Cryptography / Boolean Differential Calculus / Synthesis of Boolean Functions in Reversible Logic / Data Mining Using Binary Decision Diagrams

Professional Practice in Learning and Development guides learning and development practitioners and students in designing and delivering effective people development in the modern organization. It is a core text for those studying for learning and development qualifications such as the Chartered Institute of Personnel and Development Intermediate level, and a useful handbook for those in learning and development roles looking to develop their understanding of the latest developments facing the profession. With a particular focus on digital, blended and social learning it will help you deliver more for less. Starting with an introduction to learning and development, it shows how to make the business case for activities, use metrics to demonstrate the value add, and engage the right stakeholders. Drawing on the latest research, Professional Practice in Learning and Development highlights the new opportunities made available to the learning and development practitioner by technology, new media and the networked world in which we live. It looks at approaches to helping people learn and how to develop tailored solutions. Case studies and reflective questions develop skills in facilitating collaborative learning, working in teams, and communicating effectively with all stakeholders. This book also equips you to measure and communicate the value of the programmes and, drawing on insights from neuroscience, demonstrates some practical new tools for engaging learners to improve the effectiveness of their work.

Robotic systems consist of object or scene recognition, vision-based motion control, vision-based mapping, and dense range sensing, and are used for identification and navigation. As these computer vision and robotic connections continue to develop, the benefits of vision technology including savings, improved quality, reliability, safety, and productivity are revealed. Robotic Vision: Technologies for Machine Learning and Vision Applications is a comprehensive collection which highlights a solid framework for understanding existing work and planning future research. This book includes current research on the fields of robotics, machine vision, image processing and pattern recognition that is important to applying machine vision methods in the real world.

This publication is one of a series of practical field guides produced by the Pan American Health Organization with best practice guidance for immunisation programmes in the region. The last case of poliomyelitis in the Americas was detected in 1991, and this guide contains information on the strategies needed to maintain polio eradication in the region. Sections cover: epidemiology, clinical aspects, vaccines, immunisation activities, epidemiological surveillance, case investigation and monitoring.

REA's Essentials provide quick and easy access to critical information in a variety of different fields, ranging from the most basic to the most advanced. As its name implies, these concise, comprehensive study guides summarize the essentials of the field covered. Essentials are helpful when preparing for exams, doing homework and will remain a lasting reference source for students, teachers, and professionals. Physics I includes vectors and scalars, one-dimensional motion, plane motion, dynamics of a particle, work and energy, conservation of energy, dynamics of systems of particles, rotational kinematics and dynamics, harmonic motion, sound waves, gravitation, equilibrium of rigid bodies, fluid statics and dynamics, temperature, heat and the first law of thermodynamics, kinetic theory of gases, and entropy and the second law of thermodynamics.

Until the late 20th century, computational studies of biomolecules and nanomaterials had considered the two subjects separately. A thorough presentation of state-of-the-art simulations for studying the nanoscale behavior of materials, Simulations in Nanobiotechnology discusses computational simulations of biomolecules and nanomaterials together. The book gives readers insight into not only the fundamentals of simulation-based characterizations in nanobiotechnology, but also in how to approach new and interesting problems in nanobiotechnology using basic theoretical and computational frameworks. Presenting the simulation-based nanoscale characterizations in biological science, Part 1: Describes recent efforts in MD simulation-based characterization and CG modeling of DNA and protein transport dynamics in the nanopore and nanochannel Presents recent advances made in continuum mechanics-based modeling of membrane proteins Summarizes theoretical frameworks along with atomistic simulations in single-molecule mechanics Provides the computational simulation-based mechanical characterization of protein materials Discussing advances in modeling techniques and their applications, Part 2: Describes advances in nature-inspired material design; atomistic simulation-based characterization of nanoparticles' optical properties; and nanoparticle-based applications in therapeutics Overviews of the recent advances made in experiment and simulation-based characterizations of nanoscale adhesive properties Suggests theoretical frameworks with experimental efforts in the development of nanoresonators

for future nanoscale device designs Delineates advances in theoretical and computational methods for understanding the mechanical behavior of a graphene monolayer The development of experimental apparatuses has paved the way to observing physics at the nanoscale and opened a new avenue in the fundamental understanding of the physics of various objects such as biological materials and nanomaterials. With expert contributors from around the world, this book addresses topics such as the molecular dynamics of protein translocation, coarse-grained modeling of CNT-DNA interactions, multi-scale modeling of nanowire resonator sensors, and the molecular dynamics simulation of protein mechanics. It demonstrates the broad application of models and simulations that require the use of principles from multiple academic disciplines.

This book provides an in-depth overview of design and implementation of leakage reduction techniques. The focus is on applicability, technology dependencies, and scalability. The book mainly deals with circuit design but also addresses the interface between circuit and system level design on the one side and between circuit and physical design on the other side.

Postmodern philosophy has had a profound effect on intellectuals throughout the world. Its influence has seeped into many fields other than philosophy including literature, psychology, sociology, political science, history, journalism and management. However, there is a debate within the intellectual community as to whether this influence has been beneficial or harmful with no resolution yet in sight. This book contributes to the debate within the field of management. The book includes four chapters by the most highly regarded pro postmodern scholars and an equal number of chapters by the most highly regarded anti postmodern scholars. Adding to the controversy is a final chapter which argues that Ayn Rand's philosophy of objectivism is the proper alternative to postmodernism.

This book provides a complete and fundamental overview, from a psychoanalytical point of view, on theoretical and clinical aspects of psychodynamic or psychoanalytic psychotherapy. It includes the theory of the human mind, psychic development, psychic conflicts, trauma, and dreams.

Photoshop CC is an outstanding image editor, but it can be pretty overwhelming. This book makes learning Photoshop as easy as possible by explaining the hows and whys in a friendly, conversational style. You'll unlock Photoshop's secrets, new goodies, and time-saving features, with expert tips and practical editing advice you can use every day. The important stuff you need to know: Learn your way around. Tour Photoshop's workspace and learn how to customize it. Unleash the magic. Use selections, layers, masks, and smart objects to safely edit images; automate common chores with actions. Perfect your photos. Learn to crop, resize, color-correct, retouch, combine, and prepare photos for print or online use. Master color. Drain, change, and add color, and even create digital makeup, partial-color effects, and duotones. Be artistic. Use filters effectively, create illustrations, paintings, artistic typography, animations, and videos. Go 3D. Create and edit 3D objects and send them off to a 3D-printing service from inside Photoshop. Export web graphics. Use Generator to instantly export and resize images—just by using layer names.

Written for oncology nurses and useful in the management of fatigue associated with cancer and its treatments, this handy pocket guide contains an overview of the basic theory regarding its incidence, etiology, including physiological and psychological mechanisms, and provides content on its assessment, diagnosis, treatment, and evaluation. The role of exercise is discussed, as well as treatment with medications including Procrit(R) and Aranesp(R).

By far the best collection of sources to introduce readers to Renaissance humanism in all its many guises. What distinguishes this stimulating and useful anthology is the vision behind it: King shows that Renaissance thinkers had a lot to say, not only about the ancient world--one of their habitual passions--but also about the self, how civic experience was configured, the arts, the roles and contributions of women, the new science, the 'new' world, and so much more. --Christopher S. Celenza, Johns Hopkins University

PHP is rapidly becoming the language of choice for dynamic Web development, in particular for e-commerce and on-line database systems. It is open source software and easy to install, and can be used with a variety of operating systems, including Microsoft Windows and UNIX. This comprehensive manual covers the basic core of the language, with lots of practical examples of some of the more recent and useful features available in version 5.0. MySQL database creation and development is also covered, as it is the developer database most commonly used alongside PHP. It will be an invaluable book for professionals wanting to use PHP to develop their own dynamic web pages. Key Topics: - Basic Language Constructs - Manipulating Arrays and Strings - Errors and Buffering - Graphic Manipulation - PDF Library Extension - MySQL Database Management - Classes and Objects Concepts Features and Benefits: Explains how to use PHP to its full extent - covering the latest features and functions of PHP version 5.0, including the use of object-oriented programming Describes how to link a database to a web site, using the MySQL database management system Shows how to connect PHP to other systems and provides many examples, so that you can create powerful and dynamic web pages and applications Contains lots of illustrated, practical, real-world examples - including an e-commerce application created in PHP using many of the features described within the book The scripts used in the examples are available for download from www.phpmysql-manual.com

The authors argue that the most influential and well-known educational policy programs in the past 30 years are not based on democratic consensus, but are instead formulated by the political community as symbolic efforts meant to generate personal partisan gain.

Published since 1959, International Review of Neurobiology is a well-known series appealing to neuroscientists, clinicians, psychologists, physiologists, and pharmacologists. Led by an internationally renowned editorial board, this important serial publishes both eclectic volumes made up of timely reviews and thematic volumes that focus on recent progress in a specific area of neurobiology research. This volume reviews existing theories and current research surrounding the movement disorder Dyskinesia. Leading authors review state-of-the-art in their field of investigation and provide their views and perspectives for future research Chapters are extensively referenced to provide readers with a comprehensive list of resources on the topics covered All chapters include comprehensive background information and are written in a clear form that is also accessible to the non-specialist A textbook covering the basic principles of pharmacology as they effect the patient. Complicated basic principles are clearly examined and related to clinical practice.

Composed over two millenniums ago, the Yoga Sutras of Patanjali remains the philosophical thread that unites the ancient and current world of yoga. Yet, its many translations are underwhelming, lacking connection to reality and practicality. Innumerable forms and sects of yoga have come and gone in between. Obsessed with gaining special powers over mind and body, yoga's re-tellers have clouded its history in a mystical mist of fantastic claims. It is human nature to crave powers to radically change our lot in life. These layers of dazzle and glitter have over the centuries led us further away from yoga's spiritual core. The sutras' clear, logical, and practical path has been blurred and lost. Radically breaking with this mystical tradition, A. K. Aruna seeks to reclaim for us this fountainhead of yoga by retying the understanding of these sutras to the even more ancient source of spiritual knowledge and yoga—the Upanishads. The Upanishads eschewed limited pursuits in order to seek an ultimate goal that was not time-bound. In this still pure form of the yoga of seeking ultimate, timeless truth, the words of Patanjali become crystal clear and practical. Yoga shines in timeless relevance. A. K. Aruna's Patanjali Yoga Sutras: A Translation in the Light of Vedanta Scripture

has brilliantly refocused the light on the Yoga Sutras. This is a companion, translation only, booklet to the Translation and Commentary version of the text by A. K. Aruna.

This book focuses on the practical, day-to-day requirements of working with Sales and Distribution (SD) in SAP ERP. You ll learn how to perform transactions with fewer steps and less effort, and discover how to troubleshoot minor problems and system issues. In addition to the core areas of sales and distribution, such as sales, pricing, delivery, transportation, and billing, you ll also find coverage of more advanced topics, like special sales processes (cross-company and third party) and reporting. Each chapter provides you with the menu paths and transaction codes that are used to execute each of the many detailed examples. Comprehensive Coverage of SD Learn how to make the best use of Sales and Distribution in SAP ERP in your daily work. Tips and Tricks for Your Daily Work Maximize your time with the various tips and tricks designed to help you get everything you need out of the most common processes, tasks, and features. Step-by-Step Walkthroughs Master even the most complex functions in Sales and Distribution using step-by-step walkthroughs, enhanced with screenshots and useful tips.Reports and Tools for Data Analysis Uncover the reports and tools in SD to enable you to make decisions and evaluate data more efficiently. Real-World Examples and Insight Use the expert advice and insight provided throughout to help you with your own SD processes. Highlights * Pre-sales * Sales Order Processing * Availability Check * Pricing * Delivery * Picking * Shipping & Transportation * Billing * Reports and Analytics

This book serves as a route map for psychologists and probation officers working in probation services. Outlines the strategic framework for psychological services across prisons and probation. Gives an up-to-date picture of some key emerging areas of applied psychological practice in probation settings. Covers the development of applied psychological services, court work, mental health, working with sex offenders, risk assessment, group work, cognitive skills, multi-agency public protection panels, and lifer assessments. The editors are Deputy Head and Head of Psychology for Prisons and Probation Services, and therefore well placed to compile this book. Complements Graham Towl's book Psychology in Prisons (BPS Blackwell, 2003).