

Dk Jain Mathematics 1

This book addresses the principles and applications of metaheuristic approaches in engineering and related fields. The first part covers metaheuristics tools and techniques such as ant colony optimization and Tabu search, and their applications to several classes of optimization problems. In turn, the book’s second part focuses on a wide variety of metaheuristics applications in engineering and/or the applied sciences, e.g. in smart grids and renewable energy. In addition, the simulation codes for the problems discussed are included in an appendix for ready reference. Intended for researchers aspiring to learn and apply metaheuristic techniques, and gathering contributions by prominent experts in the field, the book offers readers an essential introduction to metaheuristics, its theoretical aspects and applications.

Class-tested and coherent, this textbook teaches classical and web information retrieval, including web search and the related areas of text classification and text clustering from basic concepts. It gives an up-to-date treatment of all aspects of the design and implementation of systems for gathering, indexing, and searching documents; methods for evaluating systems; and an introduction to the use of machine learning methods on text collection. All the important ideas are explained using examples and figures, making it perfect for introductory courses in information retrieval for advanced undergraduates and graduate students in computer science. Based on feedback from extensive classroom experience, the book has been carefully structured in order to make teaching more natural and effective. Slides and additional exercises (with solutions for lecturers) are also available through the book’s supporting website to help course instructors prepare their lectures.

The study of linear positive operators is an area of mathematical studies with significant relevance to studies of computer-aided geometric design, numerical analysis, and differential equations. This book focuses on the convergence of linear positive operators in real and complex domains. The theoretical aspects of these operators have been an active area of research over the past few decades. In this volume, authors Gupta and Agarwal explore new and more efficient methods of applying this research to studies in Optimization and Analysis. The text will be of interest to upper-level students seeking an introduction to the field and to researchers developing innovative approaches.

An Unsolved Mystery

Form, Space, and Order

Honoring the Contributions of Barry C. Arnold in Statistical Science

Report

Discrete Mathematics

“This book is the first volume of a two-volume textbook for undergraduates and is indeed the crystallization of a course offered by the author at the California Institute of Technology to undergraduates without any previous knowledge of number theory. For this reason, the book starts with the most elementary properties of the natural integers. Nevertheless, the text succeeds in presenting an enormous amount of material in little more than 300 pages.”—MATHEMATICAL REVIEWS

Three Creators? Is the legend ancient mythology or a highly developed modern science? Can a myth be so powerful that it can keep a great intellectual civilization under its effect for thousands of years? And if a powerful myth makes such an impact, then will it not be fair to take that myth as the Truth? One such truth is about the Three Creators. They are known to the whole world as the Creator, Preserver and Destroyer. 2500 AD, E-One Planet As a consequence of accidents that occurred during a huge scientific project called salvation, the atmosphere of planet E-One, whose ancient name was Earth, has become unviable. Today, human civilization is sustained on three planets, namely E-One, M-One and M-Two. The future of the human civilization depends on the success of salvation project. The Chairman of salvation Project, Sukra, receives a message from an alien flying object from a remote part of space. Sukra and the traveler in that intergalactic spacecraft meet each other for a historic talk at a place name Kash-I. Cyani Sukra and the intergalactic traveler, whose name is Kalki, seek to understand the three creators in detail for determining the future of human civilization. They both want to understand the spiritual aspect of the myth in a scientific way and the scientific aspect of it in a spiritual way. Is this the end of human civilization? Will Sukra understand the mysteries of the three creators? After all, what is this puzzle of three?

Note: This is the 3rd edition. If you need the 2nd edition for a course you are taking, it can be found as a “other format” on amazon, or by searching its isbn: 1534970746 This gentle introduction to discrete mathematics is written for first and second year math majors, especially those who intend to teach. The text began as a set of lecture notes for the discrete mathematics course at the University of Northern Colorado. This course serves both as an introduction to topics in discrete math and as the “introduction to proof” course for math majors. The course is usually taught with a large amount of student inquiry, and this text is written to help facilitate this. Four main topics are covered: counting, sequences, logic, and graph theory. Along the way proofs are introduced, including proofs by contradiction, proofs by induction, and combinatorial proofs. The book contains over 470 exercises, including 275 with solutions and over 100 with hints. There are also Investigate! activities throughout the text to support active, inquiry based learning. While there are many A Text Book of Botany

Advanced Engineering Mathematics

Contributions to complex matrix variat distributions Theory

The Journal of the University of Kuwait, Science

Economics students will welcome the new edition of this excellent textbook. Mathematics is an integral part of economics and understanding basic concepts is vital. Many students come into economics courses without having studied mathematics for a number of years. This clearly written book will help to develop quantitative skills in even the least numerate student up to the required level for a general Economics or Business Studies course. This second edition features new sections on subjects such as: matrix algebra part year investment financial mathematics

Improved pedagogical features, such as learning objectives and a set of chapter questions, along with the use of Microsoft Excel and the overall example-led style of the book means that it will be a sure fire hit with both students and their lecturers.

Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Some prominent additions are given below: 1. Variance of Degenerate Random Variable 2. Approximate Expression for Expectation and Variance 3. Lyapunov’s Inequality 4. Holder’s Inequality 5. Minkowski’s Inequality 6. Double Expectation Rule or Double-E Rule and many others

This volume presents significant advances in a number of theories and problems of Mathematical Analysis and its applications in disciplines such as Analytic Inequalities, Operator Theory, Functional Analysis, Approximation Theory, Functional Equations, Differential Equations, Wavelets, Discrete Mathematics and Mechanics. The contributions focus on recent developments and are written by eminent scientists from the international mathematical community. Special emphasis is given to new results that have been obtained in the above mentioned disciplines in which Nonlinear Analysis plays a central role. Some review papers published in this volume will be particularly useful for a broader readership in Mathematical Analysis, as well as for graduate students. An attempt is given to present all subjects in this volume in a unified and self-contained manner, to be particularly useful to the mathematical community.

Proceedings of the International Conference on Artificial Intelligence and Applied Mathematics in Engineering (ICAIAME 2019)

Convergence Estimates in Approximation Theory

Numerical Methods (As Per Anna University)

Basic Mathematics for Economists

Three Creators

Engineers are known to set the foundations and ultimately contributing in building the nation. This is the reason why it is considered as one of the top professions in the world. To be a certified engineer from reputed institutions like IITs, NITs, IIITs, etc., candidates/aspirants has to go through Joint Entrance Exam (JEE) being conducted by CBSE every year and requires an intense groundwork on subjects of Physics, Chemistry and, Mathematics from Class XI and XII syllabi. The latest edition of 16 Years’ JEE MAIN Solved Papers is designed with a purpose of facilitating an effective way of smart preparation in students to clear the upcoming JEE MAIN. As the name of the book already unfolds its key feature, with this new edition, the invaluable benefits of solving such good number of precisely solved papers continues to help students in their path to success. The detailed solutions to the 16 Years’ Solved Papers of Previous Years’ Questions from 2003 to 2018 can be easily comprehended by the students and 3 Sets of Practice are also given to overcome the doubts and fears out of exam. This is a student-friendly book with its contents sounding like interactive sessions to help you progress more in the race of winning a seat in JEE MAIN 2019. Table of ContentJEE Main 2018, JEE Main 2017, JEE Main 2016, JEE Main 2014, JEE Main 2013, AIEEE–2012, AIEEE–2011, AIEEE–2010, AIEEE–2009, AIEEE–2008, AIEEE–2007, AIEEE–2006, AIEEE–2005, AIEEE–2004, AIEEE–2003, Practice Set–1, Practice Set–2, Practice Set–3

Appropriate for one- or two-semester Advanced Engineering Mathematics courses in departments of Mathematics and Engineering. This clear, pedagogically rich book develops a strong understanding of the mathematical principles and practices that today’s engineers and scientists need to know. Equally effective as either a textbook or reference manual, it approaches mathematical concepts from a practical-use perspective making physical applications more vivid and substantial. Its comprehensive instructional framework supports a conversational, down-to-earth narrative style offering easy accessibility and frequent opportunities for application and reinforcement.

A classic introduction to the principles of architecture Now including interactive CD-ROM! For more than thirty years, the beautifully illustrated Architecture: Form, Space, and Order has been the classic introduction to the basic vocabulary of architectural design. The updated Third Edition features expanded sections on circulation, light, views, and site context, along with new considerations of environmental factors, building codes, and contemporary examples of form, space, and order. This classic visual reference helps both students and practicing architects understand the basic vocabulary of architectural design by examining how form and space are ordered in the built environment. ? Using his trademark meticulous drawing, Professor Ching shows the relationship between fundamental elements of architecture through the ages and across cultural boundaries. By looking at these seminal ideas, Architecture: Form, Space, and Order encourages the reader to look critically at the built environment and promotes a more evocative understanding of architecture. In addition to updates to content and many of the illustrations, this new edition includes a companion CD-ROM that brings the book’s architectural concepts to life through three-dimensional models and animations created by Professor Ching.

Ancient Egyptian Science

Proceedings of the Sixth Eugene Lukacs Symposium, Bowling Green, Ohio, USA, 29–30 March 1996

A Source Book

16 Years’ Solved Papers JEE Main 2021

Architecture

This book is a valuable resource for Graduate students and researchers interested in current techniques and methods within the theory of moments in linear positive operators and approximation theory. Moments are essential to the convergence of a sequence of linear positive operators. Several methods are examined to determine moments including direct calculations, recurrence relations, and the application of hypergeometric series. A collection of operators in the theory of approximation are investigated through their moments and a variety of results are surveyed with fundamental theories and recent developments. Detailed examples are included to assist readers understand vital theories and potential applications.

This volume contains the papers from the Sixth Eugene Lukacs Symposium on “Multidimensional Statistical Analysis and Random Matrices”, which was held at the Bowling Green State University, Ohio, USA, 29–30 March 1996. Multidimensional statistical analysis and random matrices have been the topics of great research. The papers presented in this volume discuss many varied aspects of this all-encompassing topic. In particular, topics covered include generalized statistical analysis, elliptically contoured distribution, covariance structure analysis, metric scaling, detection of outliers, density approximation, and circulant and band random matrices.

1. Maharashtra CLET is a self study guide designed for the CLET exam 2. The book concentrates on 3 years integrated programme. 3. Solved Papers and 3 Practice Sets are given for practice 4. Loaded with theories and question strictly following the exam pattern The book Maharashtra CLET Online CET 222 deals with 3 years LLB integrated program that has been specifically designed for the aspirants in the bachelor of law. This book divides the entire syllabus into chapters under the categories of Legal Aptitude, Indian Constitution, English Language, Reasoning Ability, and General Knowledge. Questions provided in the Solved Papers and Practice Sets are for practice with well explanatory solutions supported by the finest illustrations that promote easy learning and an in-depth understanding of the exam pattern. TOC Model Solved Paper 221. Solved Papers [22-217]. Legal Aptitude. Indian

Constitution, English Language, Reasoning Ability, General Knowledge, Practice Sets (1-3).

Fundamentals of Mathematical Statistics

Multidimensional Statistical Analysis and Theory of Random Matrices

Demonstratio mathematica

Jaina-siddh7nta-bh7skara

16 Years’ Solved Papers JEE Main 2020

1. JEE Main Solved Papers (2020–2013) is a complete practice package of JEE Mains 2. This book includes 16 question papers of JEE Main Online papers 2020 & 2019 3. Solved Papers from 2018 –2013 are given for practice 4. Student friendly solutions are given for each question for the quick revision of concepts JEE Entrance is the gateway to some of the prestigious engineering technology institutions and every year nearly 10 Lakhs students appear in the race of the rigorous practice is required to get through the exam. Preparation never ends until the last minute if there is no proper planning done before the exam. To make students well versed with pattern as well as the level of the questions asked in the exam, presenting the latest edition of “JEE Main Solved Paper 2020 – 2013” facilitating an effective way of smart preparation to clear the upcoming JEE Main Paper. As the name of the book already unveils its key features, it is loaded with good number of questions that includes all 16 question papers of JEE Main Online 2020 & 2019 and remaining solved papers 2018-2013. Detailed solution comprehends the preparation that helps in overcoming the doubts and fears about the exam. This is a student-friendly book with its contents sounding like interactive sessions to help you progress more in the race of winning a seat in JEE MAIN 2021. TABLE OF CONTENT JEE MAIN ONLINE SOLVED PAPERS 2020 September Attempt: 2 Sept, 2020 (Shift I), 2 Sept, 2020 (Shift II), 2 Sept, 2020 (Shift II), 3 Sept, 2020 (Shift II), 4 Sept, 2020 (Shift II), 5 Sept, 2020 (Shift I), 5 Sept, 2020 (Shift I), 5 Sept, 2020 (Shift II), 6 Sept, 2020 (Shift I), 6 Sept, 2020 (Shift II), January Attempt: 7 Jan, 2020 (Shift I), 7 Jan, 2020 (Shift II), 8 Jan, 2020 (Shift I), 8 Jan, 2020 (Shift II), 9 Jan, 2020 (Shift I), 9 Jan, 2020 (Shift II), JEE MAIN ONLINE SOLVED PAPERS 2019: April Attempt: 8 April, 2019 (Shift I), 8 April, 2019 (Shift II), 9 April, 2019 (Shift I), 9 April, 2019 (Shift II), 10 April, 2019 (Shift I), 10 April, 2019 (Shift II), 10 April, 2019 (Shift II), 11 April, 2019 (Shift I), 11 April, 2019 (Shift II), 12 April, 2019 (Shift I), 12 April, 2019 (Shift II), January Attempt: 9 Jan, 2020 (Shift I), 9 Jan, 2020 (Shift II), 9 Jan, 2020 (Shift II), 11 Jan, 2019 (Shift I), 11 Jan, 2019 (Shift II), 12 Jan, 2019 (Shift I), 12 Jan, 2019 (Shift II), JEE MAIN ONLINE SOLVED PAPERS 2018–13.”

About the Book: This comprehensive textbook covers material for one semester course on Numerical Methods (MA 1251) for B.E./ B. Tech. students of Anna University. The emphasis in the book is on the presentation of fundamentals and theoretical concepts in an intelligible and easy to understand manner. The book is written as a textbook rather than as a problem/guide book. The textbook offers a logical presentation of both the theory and techniques for problem solving to motivate the students in the study and application of Numerical Methods. Examples and Problems in Exercises are used to explain.

Document from the year 2017 in the subject Mathematics – Applied Mathematics, grade: 9.5, course: Calculus, language: English, abstract: This book on “The Lecture Notes on Differential and Integral Calculus” has been specifically written to meet the requirements of the B.G first semester students of all Indian universities in general and Kashmir University and Cluster University in particular. The subject matter has been discussed in such a simple way so that the students will find no difficulty to understand it. The proofs of various theorems and examples have been given with minute details. Each unit of this book contains complete theory and fairly large number of solved examples. Although, the authors have tried their best in the formulation of the subject matter very nicely, but that can be further improved by the suggestions received from its readers. During the preparation of the manuscript of this book, the authors has incorporated the fruitful academic suggestions provided by Prof. Renu Jain, Jiwaji University Gwalior. Dr. D. K. Jain, (MITS) Gwalior. Also we would like to mention our friends/colleagues Dr. Mizamil Ahmad (HOD Physics), Dr. Farooq Ahmad (HOD Urdu) and Sajad ahmad Wani for the fruitful discussions and who always believed in us and boosted our confidence to write this manuscript. Words can’t express our gratitude to our families, without their support this work would not have been possible.

Advances in Statistics – Theory and Applications

Moments of Linear Positive Operators and Approximation

Lecture Notes on Differential and Integral Calculus

Pearson New International Edition

ICSE Biology Book-I For Class-IX

About the Book: This book Engineering Mathematics-II is designed as a self-contained, comprehensive classroom text for the second semester B.E. Classes of Visveswaraiah Technological University as per the Revised new Syllabus. The topics included are Differential Calculus, Integral Calculus and Vector Integration, Differential Equations and Laplace Transforms. The book is written in a simple way and is accompanied with explanatory figures. All this make the students enjoy the subject while they learn. Inclusion of selected exercises and problems make the book educational in nature. It show.

This edited collection brings together internationally recognized experts in a range of areas of statistical science to honor the contributions of the distinguished statistician, Barry C. Arnold. A pioneering scholar and professor of statistics at the University of California, Riverside, Dr. Arnold has made exceptional advancements in different areas of probability, statistics, and biostatistics, especially in the areas of distribution theory, order statistics, and statistical inference. As a tribute to his work, this book presents novel developments in the field, as well as practical applications and potential future directions in research and industry. It will be of interest to graduate students and researchers in probability, statistics, and biostatistics, as well as practitioners and technicians in the social sciences, economics, engineering, and medical sciences.

This text introduces the basics of selected topics in applicable mathematics. Beginning with basic concepts, the topics are developed systematically with precision and elegance. Each chapter contains an introduction with the relevant definitions and concepts.

Introduction to Analytic Number Theory

World Encyclopaedia of Nations and Nationalities

Guide to Indian Periodical Literature

Topics in Mathematical Analysis and Applications

Combined Membership List

This volume is part of Marshall Clagett’s three-volume study of the various aspects of science of Ancient Egypt. Volume Two covers calendars, clocks, and astonomical monuments. Within each area of treatment there is a fair chronology evident as benefits a historical work covering three millenia of activity. Includes more than 100 illustrations of documents and scientific objects.

New Engineering MathematicsAlpha Science International Limited

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

Notices of the American Mathematical Society

New Engineering Mathematics

An Open Introduction

Artificial Intelligence and Applied Mathematics in Engineering Problems

Foundations of Data Science

Lists for 19 include the Mathematical Association of America, and 1955- also the Society for Industrial and Applied Mathematics.

This work is based on the experience and notes of the authors while teaching mathematics courses to engineering students at the Indian Institute of Technology, New Delhi. It covers syllabi of two core courses in mathematics for engineering students.

This book features research presented at the 1st International Conference on Artificial Intelligence and Applied Mathematics in Engineering, held on 20–22 April 2019 at Antalya, Manavgat (Turkey). In today’s world, various engineering areas are essential components of technological innovations and effective real-world solutions for a better future. In this context, the book focuses on problems in engineering and discusses research using artificial intelligence and applied mathematics. Intended for scientists, experts, M.Sc. and Ph.D. students, postdocs and anyone interested in the subjects covered, the book can also be used as a reference resource for courses related to artificial intelligence and applied mathematics.

9 Years Solved Papers JEE Main 2022

Introduction to Information Retrieval

Metron

Maharashtra CLET 2022 for 3 Years Course

Indian Journal of Mathematics

Well-labelled illustrations, diagrams, tables, figures and experiments have been given to support the text, wherever necessary. At the end of each chapter, Key Terms have been given. A variety of Review Questions, according to the latest examination pattern, has been provided for adequate practice.

The origins and development of the fascinating variety of continents, countries and communities of the world are the engrossing subjects of the present prize set of 17 Vols. in 34 Parts of the encyclopaedia. With marvelously lucid text and equally graphic illustrations, the writers and editors present a panoramic account of the splendid variety of the family of mankind, its numerous and varied habitations, its physical, human and economic geography of man and his activities, and the living dynamic relation that mankind had with fellow communities across land and sea as well as with the planet that sustains all of them. The World Encyclopaedia of Nations and Nationalities opens to students, teachers and general readers a vast and beautiful window onto the great as well as the little known customs, manners and cultures of the world, reveals the universal geographical features and singularities of all countries in the continents, the introduces in vivid detail the many kind of inhabitants that are found world-wide. Not only is this brilliantly conceived encyclopaedia the pride of many libraries across the world, but it is also regarded as an apt companion and complement to the earlier historic work of Darwin, namely, Origin of the Species. In its comprehensive sweep and vibrant treatment the present the present volumes of this encyclopaedia will be an essential part of all libraries.

Engineering Mathematics - Ii

Metaheuristic and Evolutionary Computation: Algorithms and Applications