

Call No : 005.7 WRI-S

Optimization techniques are at the core of data science, including data analysis and machine learning. An understanding of basic optimization techniques and their fundamental properties provides a crucial foundation for students, researchers, and practitioners in these areas. This text covers the fundamentals of optimization algorithms in a compact, self-contained way, focusing on the techniques most relevant to data science. An introductory chapter demonstrates that many standard problems in data science can be formulated as optimization problems. Next, many fundamental methods in optimization are described and analyzed, including: gradient and accelerated gradient methods for unconstrained optimization of smooth especially convex functions the stochastic gradient...

Komaragiri Srinivasa Raju Dasika Nagesh Kumar

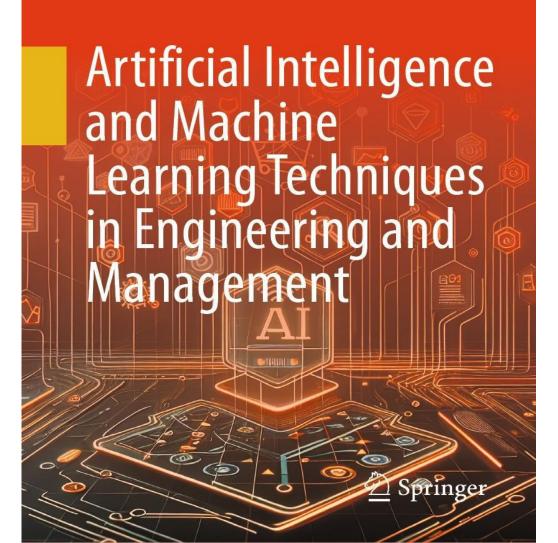


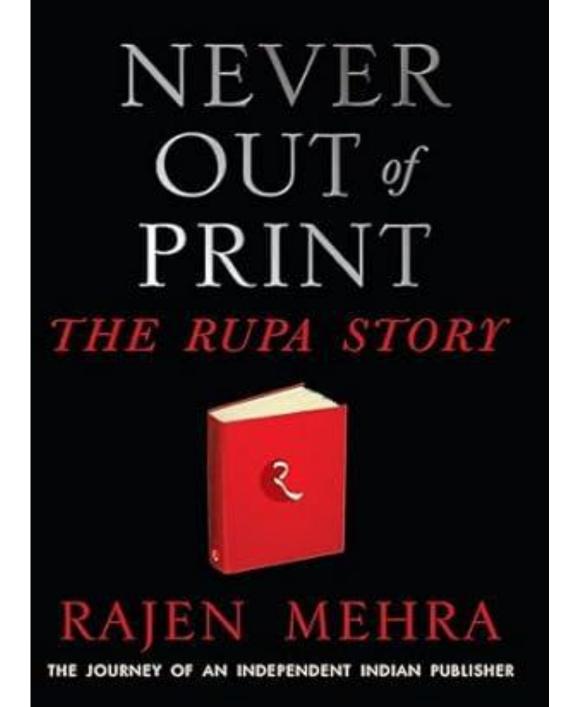
Acc. No : E-book

Call No : 006.31068 RAJ-S

The present book covers various facets of Artificial Intelligence, Machine Learning, and Fuzzy Logic. It includes a brief discussion on performance indicators, Classical and Advanced Machine Learning algorithms, Fuzzy logic-based modelling algorithms, Emerging Research Areas, including Blockchain, recent ML techniques, Evolutionary Algorithms, Large Language Model based Generative AI, the Internet of Things, Big Data, Decision Support Systems, Taguchi design of experiments, data augmentation, and Cross-Validation, and representative case studies. The appendix covers representative AI tools, data sources, books, and journals on AI. The present book can support Undergraduate, Postgraduate, and Ph.D. students in...

Link: https://link.springer.com/book/10.1007/978-981-96-2621-2







Call No : 070.50954 MEH-R

Rupa began on a Calcutta pavement in 1936, when D. Mehra, an impecunious but driven salesman, decided to try his hand at selling books. Within a generation, he had established Rupa as a major purveyor of imported books. Successive generations would make the firm the country's leading distributor of English-language trade books, representing some of the world's most important publishers, including Penguin, HarperCollins, Faber, and many more. As the company grew, it began publishing its titles. Legendary filmmaker Satyajit Ray designed the publishing house's first colophon and became one of its earliest patrons. Other notables on the Rupa list included sportsmen like Sunil Gavaskar, whose memoir, Sunny Days, gave it one of its bestsellers; Chetan Bhagat, who would go on to become India's largest-selling...

# EMPOWER Your SELF-CARE

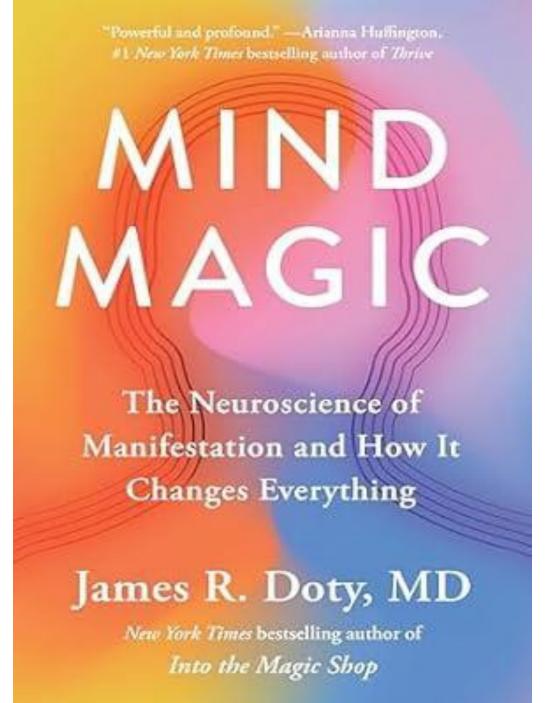
How to Transform Your Life with a Comprehensive Guide for Reducing Stress and Increasing Resilience



Acc. No : 49495

Call No : 155.9042 ALL-S

Self-care is essential for maintaining our physical, mental, and emotional well-being, but it can be challenging to prioritize and practice self-care in our busy lives. This book offers a comprehensive guide to self-care, covering topics such as nutrition and exercise, sleep, personal hygiene, stress management, communication, mindfulness, building healthy relationships, time management, and setting goals. With practical tips and strategies for incorporating self-care into daily life, this book is an essential resource for anyone looking to prioritize their well-being and cultivate a sense of balance and fulfilment. Whether you're struggling to find time for self-care or simply looking for ways to improve your overall well-being, this book has something for you. The read has been a...





Call No : 158.1 DOT-J

This empowering book helps readers discover the power of manifestation. Neurosurgeon, compassion expert, and bestselling author Dr James Doty reframes manifesting not as a way of gaining great wealth and possessions, but as a daily practice. He teaches us how to direct our attention in the right way and gives readers the tools and insights they need to manifest their visions and improve their circumstances. With compassion, heart, and captivating storytelling, we learn how to become the captain of our journey. James shows us how an empowering inner dialogue and selfagency are the keys to manifestation, inspiring change and positive transformation. By following the guided meditations and journaling practices in the book, readers will be able to create the life they want and...



## THICH NHAT HANH



#### THE BLOOMING OF A LOTUS

FOR MINDFULNESS, HEALING,
AND TRANSFORMATION

Acc. No : 49383

Call No : 294.34435 HAN-T

In The Blooming of a Lotus, Thich Nhat Hanh, one of the world's most revered Buddhist teachers, presents a lucid yet powerful guide to building loving relationships, cultivating compassion, and fostering a deeper sense of commitment to the self. Through a range of meditation exercises, this book teaches both beginners and seasoned practitioners how to regulate their patterns of consumption and actions to become more aware and, as a result, prevent grief and anger from driving our decisions. Thematically organized according to the complex bonds we share with our physical bodies, our inner world, and the outside world, The Blooming of a Lotus is a meditative journey that will enable readers to experience a calmer, more rooted, and, ultimately, more joyous way of life. Comprising more than...









## INDIA'S GREATEST REFORMERS

EXTRAORDINARY STORIES

DR B.R. AMBEDKAR • BABA AMTE • BEGUM SULTAN
JAHAN • BILKEES IDREES LATIF • DURGABAI
DESHMUKH • E.V. RAMASWAMI • JAGAN NATH
KAUL • JANAKI DEVI BAJAJ • DR JAVAID RAHI •
JYOTIRAO PHULE • K. VISHWANATHAN • KAILASH
SATYARTHI • MARTHA FARRELL • MARY CLUBWALA
JADHAV • MAHATMA GANDHI • MOTHER TERESA
• RABINDRA NATH UPADHYAY • RAJA RAM MOHAN
ROY • DR RAJNIKANT AROLE • RUNA BANERJEE
• SHALINI MOGHE • SUBHAS CHANDRA BOSE •
SUBRAMANIA BHARATI • SUNDERLAL BAHUGUNA
• SWAMI SIVANANDA • SWAMI VIVEKANANDA •
TARABAI SHINDE • VINOBA BHAVE

Acc. No : 49386

Call No : 303.48409 JOH-K

India's Greatest Reformers documents the stories of 51 extraordinary men and women who, in their times, undertook various social reforms, at times facing stiff resistance from society. Raja Ram Mohan Roy saw to it that the evil practice of Sati, the practice of burning a widow on the pyre of her husband, was abolished. Ishwar Chandra Vidyasagar succeeded in getting a legislative act adopted in 1856 allowing widows to remarry. Mahatma Gandhi and Dr B.R. Ambedkar worked tirelessly for the eradication of untouchability. Dayanand Saraswati castigated persons who believed in the caste system. Great women like Mary Clubwala Jadhav and Sindhutai Sapkal worked for girls' education and orphanages, respectively. From contemporary India, Kailash Satyarthi, Dr Bindeshwar Pathak...

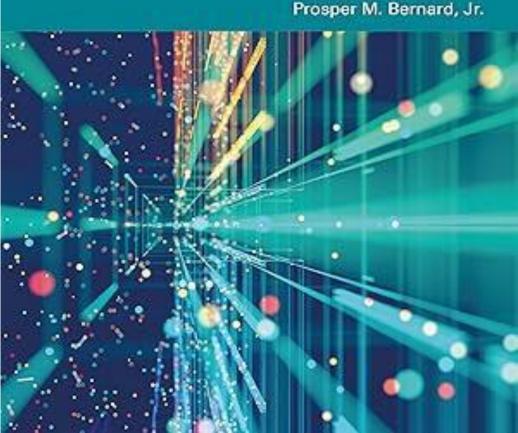




#### Comparative **Political Economy**

Theory and Evidence

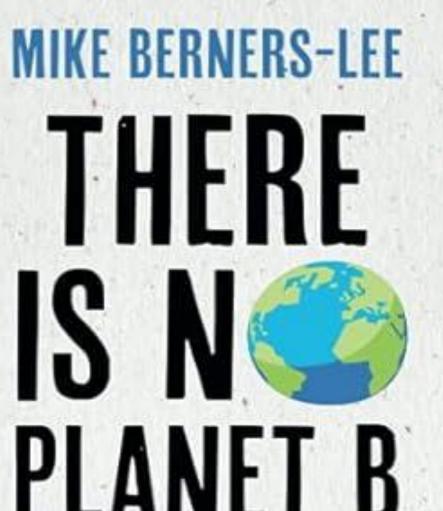
Prosper M. Bernard, Jr.



Acc. No : 49574

Call No : 338.6046 BER-P

Why do unemployment, inflation, and growth rates vary across political economies? Why are some capitalist societies more equitable than others? Why is public spending higher in some countries than in others? Drawing on insights from political science, economics, and business, this book addresses these and other related questions in the context of advanced capitalist democracies. The first part of the book investigates how macroeconomic performance and policy outcomes such as public spending, tax revenue, and trade openness are shaped by various economic and political institutions as well as democratic politics. The second part probes the effects of economic performance and social changes on domestic politics. At the end of each chapter, key terms, review questions, and a short list of recommended...



'massively important and massively entertaining' - Bill McKibben
'a handbook for how humanity can thrive' - Financial Times

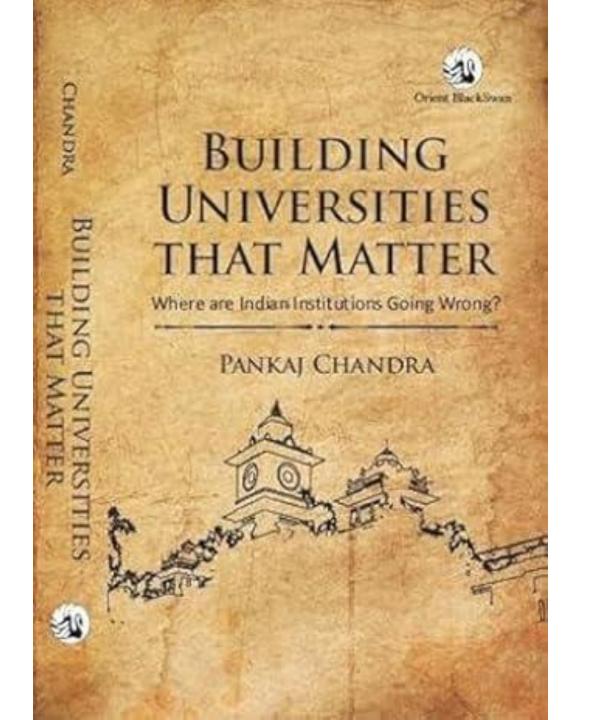




Acc. No : 49937

Call No : 363.7 BER-M

Feeding the world, climate change, biodiversity, antibiotics, plastics, pandemics - the list of concerns seems endless. But what is most pressing, and what should we do first? Do we all need to become vegetarians? How can we fly in a low-carbon world? How can we take control of technology? And, given the global nature of the challenges we now face, what on Earth can any of us do, as individuals? Mike Berners-Lee has crunched the numbers and plotted a course of action that is full of hope, practical, and enjoyable. This is the big-picture perspective on the environmental and economic challenges of our day, laid out in one place, and traced through to the underlying root questions of how we live and think. This updated edition has new material on protests, pandemics, wildfires, and...



Call No : 378.54 CHA-P

Building universities that matter provides a detailed Analysis of the neglected issues of governance in higher education, the processes that weaken governance systems in universities, and how they impact learning on campuses. The University is different from a bureaucratic or commercial organization, but has not been managed differently. As a result, it no longer remains a haven for new experiments, new ideas, and new voices. This book is also about people, faculty, boards, bureaucrats, and politicians, and how together, they have failed the student. At a time when universities in India are being critiqued for underachievement, the book builds a case for a redesign of the University as an organization. Building Universities That Matter offers a transformative vision for Indian higher education...

# innovate achieve lead

#### Combinatorics, Modeling, Elementary Number Theory

From Basic to Advanced

Ivan Cherednik





Acc. No : 49883

Call No: 511 CHE-I

This book is mostly based on the author's 25 years of teaching combinatorics to two distinct sets of students: first-year students and seniors from all backgrounds. The prerequisites are kept to a minimum; essentially, only high school algebra is required. The design is to go quickly from zero knowledge to advanced themes and various applications with a lot of topics intended for additional reading and research projects. It contains an all-inclusive collection of 135 problems and 275 exercises with four difficulty levels: solutions, hints and answers are provided. Some themes of the book: **Enumerative combinatorics and basic graph theory:** Introduction to dimers, tilings, magic and Latin squares, permutations, combinations, generating functions, games of chance, random walks, binomial and...





The Navier-Stokes equations describe the motion of fluids and are an invaluable addition to the toolbox of every physicist, applied mathematician, and engineer. The equations arise from applying Newton's laws of motion to a moving fluid and are considered, when used in combination with mass and energy conservation rules, to be the fundamental governing equations of fluid motion. They are relevant across many disciplines, from astrophysics and oceanic sciences to aerospace engineering and materials science. This Student's Guide provides a clear and focused presentation of the derivation, significance, and applications of the Navier-Stokes equations, along with the associated continuity energy equations. Designed as a useful supplementary resource for undergraduate and...

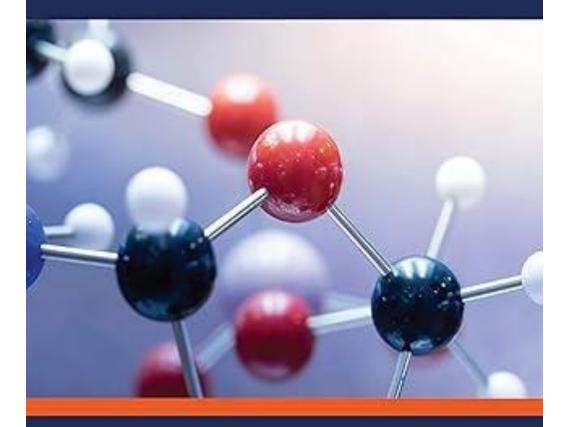
Call No : 518.64 GAR-J



Call No: 530 WAN-J

Written by a former Olympiad student, Wang Jinhui, and a Physics Olympiad national trainer, Bernard Ricardo, Competitive Physics delves into the art of solving challenging physics puzzles. This book not only expounds a multitude of physics topics from the basics but also illustrates how these theories can be applied to problems, often in an elegant fashion. With worked examples that depict various problem-solving sleights of hand and interesting exercises to enhance the mastery of such techniques, readers will hopefully be able to develop their own insights and be better prepared for physics competitions. Ultimately, problem-solving is a craft that requires much intuition. Yet this intuition, perhaps, can only be honed by trudging through an arduous but fulfilling journey of enigmas. This is the...

# UNDERSTANDING GENERAL CHEMISTRY



Atef Korchef



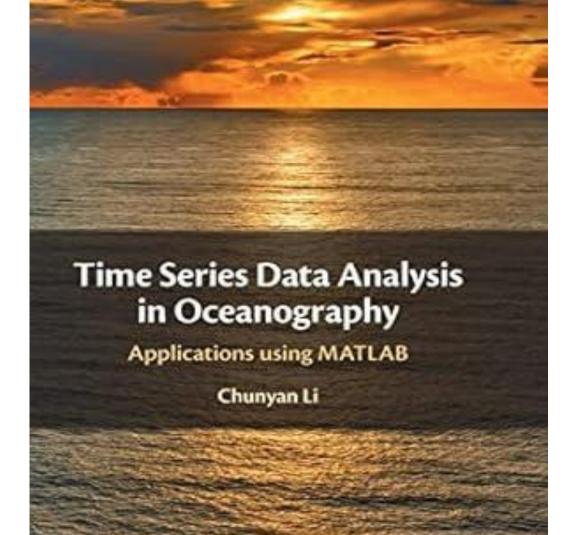


Acc. No : 49608

Call No: 540 KOR-A

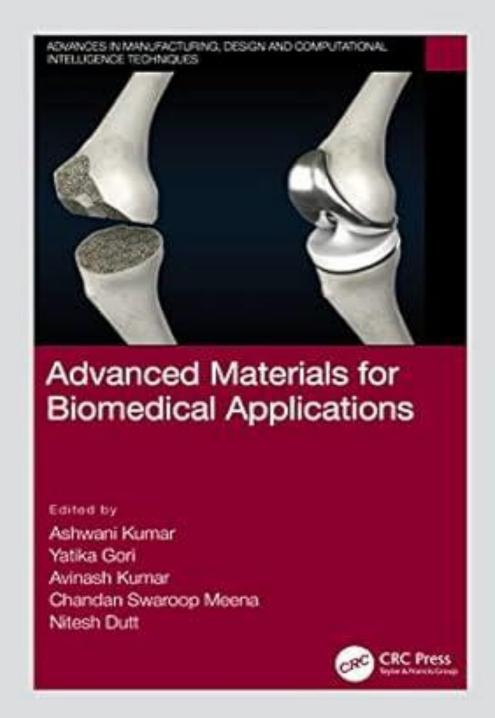
**Understanding** General Chemistry details fundamentals of general chemistry through a wide range of topics, relating the structure of atoms and molecules to the properties of matter. Written in an easy-tounderstand format with helpful pedagogy to fuel learning, the book features main objectives at the beginning of each chapter, get smart sections, and a check your reading section at the end of each chapter. The text is filled with examples and practices that illustrate the concepts at hand. In addition, a summary, extensive MCQs, exercises, and problems with the corresponding answers and explanations are readily available. Additional features include alerting students to common mistakes and explaining in simple ways and clear applications how to avoid these mistakes. Offers...





Call No : 551.460727 LI-C

Chunyan Li is a course instructor with many years of experience in teaching time series analysis. His book is essential for students and researchers in oceanography and other subjects in the Earth sciences, looking for a complete coverage of the theory and practice of time series data analysis using MATLAB. This textbook covers the topic's core theory in depth, and provides numerous instructional examples, many drawn directly from the author's own teaching experience, using data files, examples, and exercises. The book explores many concepts, including time, distance on Earth, wind, current, and wave data formats; finding a subset of shipbased data along planned or random transects; error propagation; Taylor series expansion for error estimates; the least squares method based functions and...





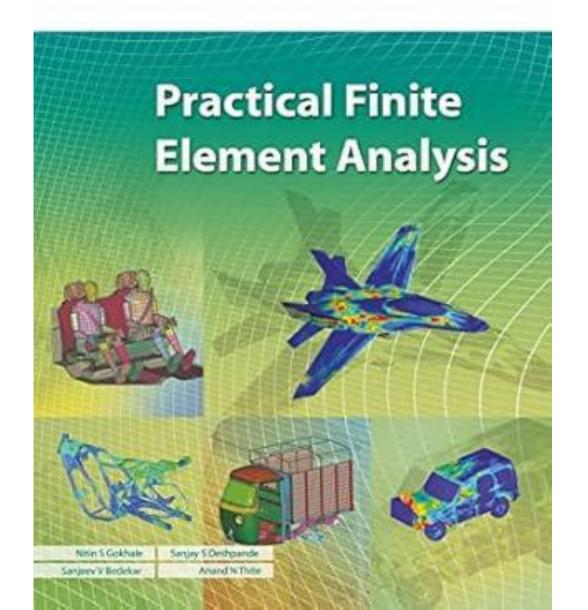
Call No : 610.28 KUM-A

The text discusses synthesis, processing, design, simulation, and characterization of biomaterials for biomedical applications. It synergizes exploration related to various properties and functionalities in the biomedical field through extensive theoretical and experimental modeling. It further presents advanced integrated design and nonlinear simulation problems occurring in the biomedical engineering field. It will serve as an ideal reference text for senior undergraduate and graduate students, and academic researchers in fields including biomedical engineering, mechanical engineering, materials science, ergonomics, and human factors. The book employs a problem-solution approach, where, in each chapter, a specific biomedical engineering problem is raised and its numerical and...



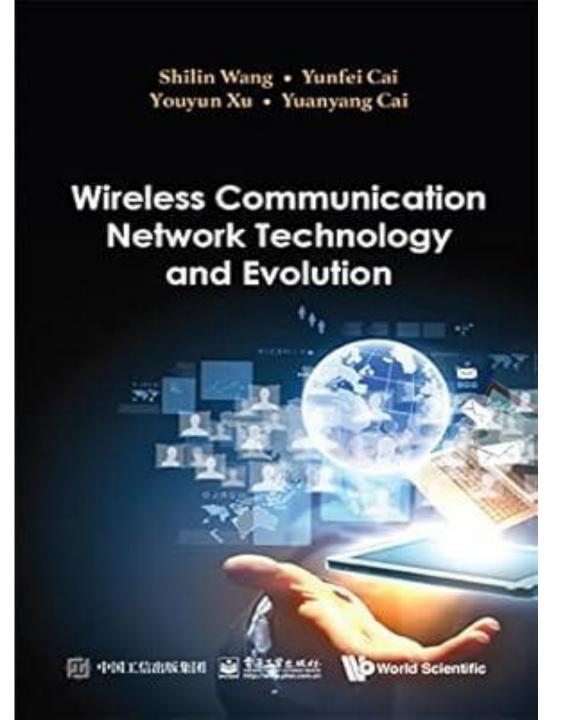
Call No : 616.89 COT-F

Stress is a normal part of life, but it can be overwhelming. The habits, tools, and advice in these pages will help you cope better, understand your worries, and learn how to pause and respond rather than react when life feels too much. This is the advice I've received, the lessons I've learned in my ups and downs, the expert conversations from my Happy Place podcast, the therapies I've tried, and the habits I've created to keep working towards good days. By focusing on the little things, practising self-awareness, and getting creative with the exercises and simple ideas, daily tricks, and practical tools in this book, you can find balance in our hectic world and unlock daily happiness. Writing this book has been a bit of an emotional roller coaster. More so than any book I've written...



Call No : 620.00151 GOK-N

Fea is a sought-after dream career for Mechanical engineers. Often, they want to update themselves with the latest available volume of books. This excellent book, coloured on very expensive Paper with beautiful full-colour printing, is a one-stop book for any Mechanical engineer on the complex subject of `finite element analysis. The book aims to understand finite element analysis as a computational engineering tool and to share the knowledge and experience in this field. It will provide appreciation between various disciplines working together in engineering projects. This book summarizes the most important techniques of current Finite Element applications. It is dedicated to the needs of practicing engineers and provides structured, wellunderstandable information for managers, design and...





Call No : 621.38212 WAN-S

This book provides a panoramic overview of wireless and their communication network technologies evolution, namely cellular mobile networks, especially 5G, Wireless Local Area Network, and Narrow Band Internet of Things. With rich experiences in teaching and scientific research, the renowned authors selectively analyze several key technologies that restrict the performance of wireless communication and computer networks. For easy reading, each chapter is illustrated in a somewhat the style of lesson plan. The useful reference text will benefit both undergraduate and in the fields of wireless graduate students communication, computer networks, electronic engineering, and automatic control etc. Wireless communication has become an indispensable basic...



### Railway Transportation Systems

Design, Construction and Operation

Christos N. Pyrgidis





Acc. No : 49669

Call No : 625.1 PYR-C

Railway Transportation Systems covers the entire range of railway passenger systems, from conventional and high-speed intercity systems to suburban, regional, operating on steep gradients, and urban ones. It also examines in depth freight railway systems transporting conventional loads, heavy loads, and dangerous goods. For each system, the text provides a definition; an overview of its evolution and examples of good practice; the main design, construction, and operational characteristics; and the preconditions for its selection. Additionally, it offers a general overview of safety, interfaces with the environment, forces acting on the track, and techniques that govern the stability and guidance of railway vehicles. This new edition brings two new chapters. One concerns pre-feasibility studies...

"Rohit leverages very effectively his experience of three decades in this insightful, differentiated, yet easy to read book."

—PRASHANT JAIN, India's Best Known Fund Manager



# Wealth

SECRETS TO GETTING RICH AT ANY AGE

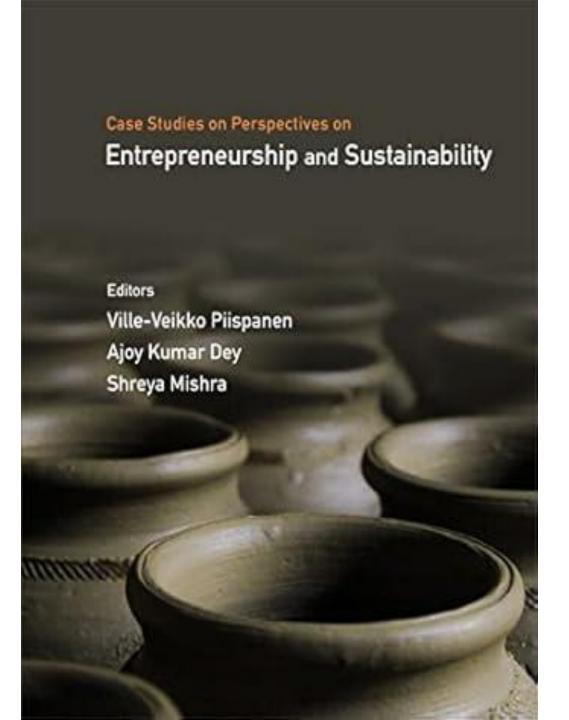
ROHIT SARIN

Acc. No : 49498

Call No : 650.12 SAR-R

India is on the cusp of becoming the world's third-largest economy. If that happens, then every business in India, big and small, if managed well, could grow at least five times, if not more, over the next ten years. India has the third-largest number of billionaires and millionaires in the world, and its middle class is expected to grow to 41 per cent of the population by 2031. In more ways than one, there is no better time for individuals and families to create wealth for themselves through smart saving, sound investments, calculated risk-taking, and other strategies. A book for budding investors as well as highnet-worth individuals, Unlocking Wealth demystifies the process of wealth creation. It explains why it's never too early or too late to begin building wealth and sets out clearly defined ways in which you can make yourself...





Call No : 658.421 PII-V

This book presents an up-to-date view of the variety of case studies of entrepreneurship and sustainability in different cultural and social contexts in Asia, Europe, North America, and other countries. The cases provide a novel understanding of a variety of organizations, from public to private entities and from start-ups to large corporations. The rich variety of cases creates insights into circular economy in the transition towards sustainable future, business opportunities, digitalization, and marketing and service strategies in the fast-evolving markets where businesses and organizations need to be agile for creating environmental, social, cultural, and economic value. The collection of cases represents different aspects of entrepreneurship, sustainable business, innovative...



11 Real-Life Cases of Indian Start-Ups



M. Anil Ramesh
Priya Grover
Sabyasachi Dasgupta

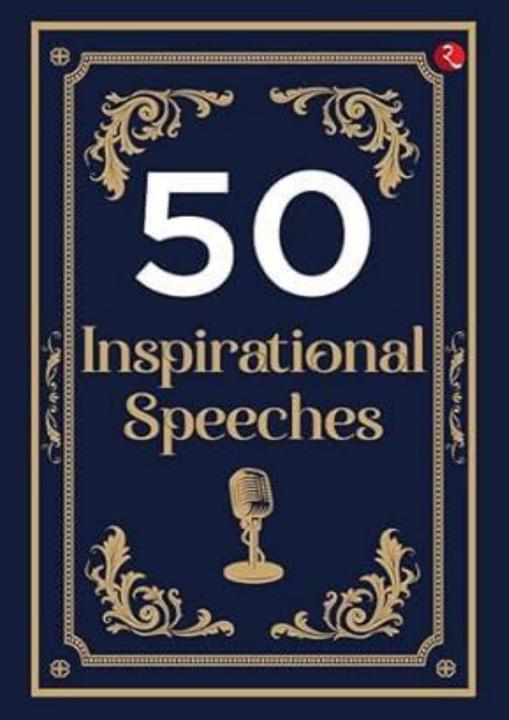




Acc. No : 48249

Call No : 658.802 RAM-M

11 Real-Life Cases of Indian Start-Ups analyse real-life marketing challenges faced by start-ups from across the marketing mix of product, price, place, and promotion. Eleven original case studies discuss the experiences of successful Indian entrepreneurs across a wide variety of sectors, including health tech, fintech, media and entertainment, and fast-moving consumer goods. Each case investigates the dilemmas faced by start-ups on issues in their marketing mix and presents guidance on practical ways to resolve them through fine-tuning the marketing strategy. A special focus is placed on the views and actions of the start-up founder or CEO dealing with the dilemma, to highlight their innovative solutions. The book is a highly informative guide for entrepreneurs, marketing scholars, and practitioners...





Call No: 825 FEN-R

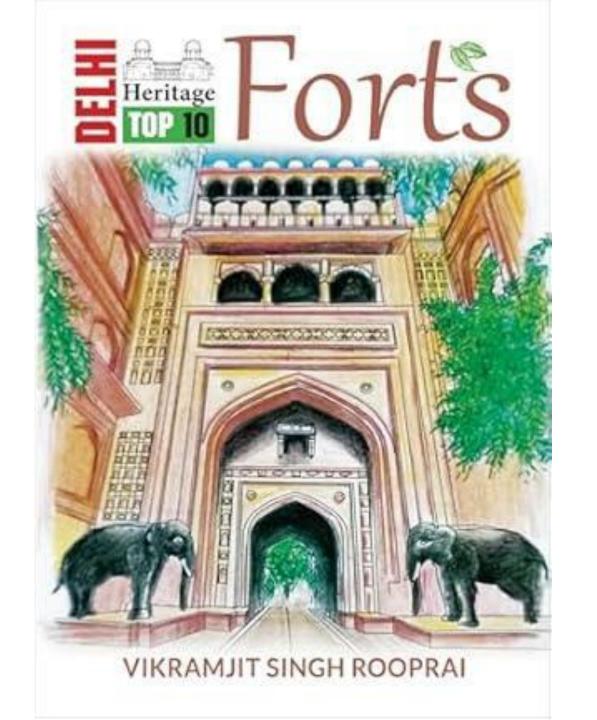
Step into a world where the sheer force of words inspires and ignites change. From iconic leaders like Martin Luther King Jr., Mahatma Gandhi, and Nelson Mandela to remarkable voices like Subhas Chandra Bose and Winston Churchill, these powerful orators shaped history, and their words continue to resonate with readers today. Dive into more recent speeches from professionals such as Steve Jobs and Denzel Washington, which will motivate you to chase your dreams, no matter how audacious they may seem. 50 Greatest Inspirational Speeches is your gateway to timeless wisdom and a call to make your voice heard. Many speeches are made, men of Athens, at almost every meeting of the assembly, about the aggressions which Philip has been committing, ever since he concluded...





Call No: Biography ISA-W

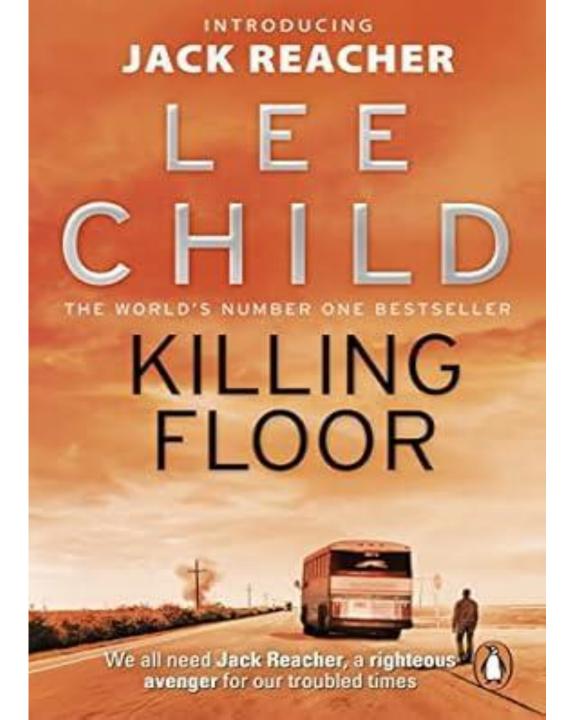
When Elon Musk was a kid in South Africa, he was regularly beaten by bullies. One day a group pushed him down some concrete steps and kicked him until his face was a swollen ball of flesh. He was in the hospital for a week. But the physical scars were minor compared to the emotional ones inflicted by his father, an engineer, rogue, and charismatic fantasist. His father's impact on his psyche would linger. He developed into a tough yet vulnerable man-child, prone to abrupt Jekyll-and-Hyde mood swings, with an exceedingly high tolerance for risk, a craving for drama, an epic sense of mission, and a maniacal intensity that was callous and at times destructive. At the beginning of 2022, after a year marked by SpaceX launching thirty-one rockets into orbit, Tesla selling a million cars, and him becoming...





Call No : 954.56 ROO-W

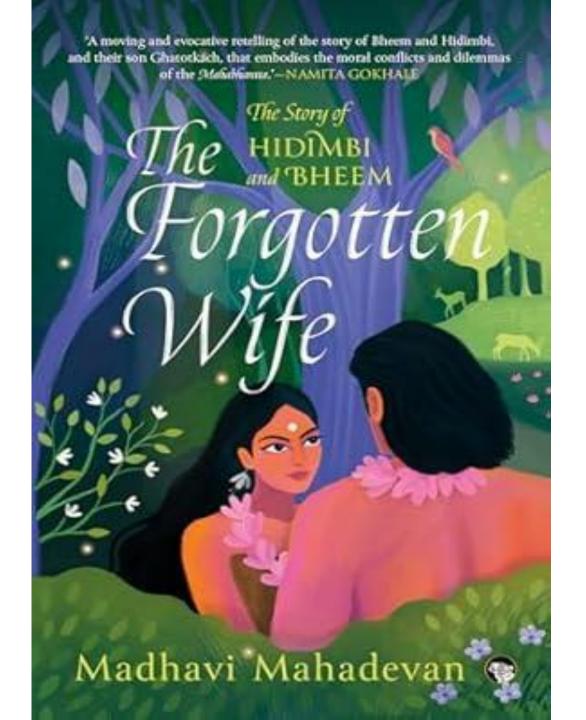
This book takes you on an enriching expedition through Delhi and its forts. It reveals the stories behind these structures and the opulence of these magnificent monuments. Throwing light on the rulers and dynasties associated with the monuments, the book is a collection of interesting historical events. The elegance of the structures deserves to be appreciated not only for their face value but the intangible wealth they symbolize. They epitomize the diversity of our country and are the standing evidence of the legacy of some great rulers. Along with the detailed descriptions of the remnants of the structures and their original plans, the book discusses the anecdotes associated with them as well. From the construction to the destruction, esp by the British, this book provides the facts through time and...





Call No : Fiction CHI-L

Jack Reacher jumps off a bus and walks fourteen miles down a country road into Margrave, Georgia. An arbitrary decision he's about to regret. Reacher is the only stranger in town on the day they have had their first homicide in thirty years. The cops arrest Reacher, and the police chief turns eyewitness to place him at the scene. As nasty secrets leak out and the body count mounts, one thing is for sure. They picked the wrong guy to take the fall. Although the Jack Reacher novels can be read in any order, Killing Floor is the first book in the internationally popular series. It presents Reacher for the first time, as the tough ex-military cop of no fixed abode, a righter of wrongs, the perfect action hero. Killing Floor is the first book in the phenomenal bestselling Jack Reacher series by Lee Child, It...

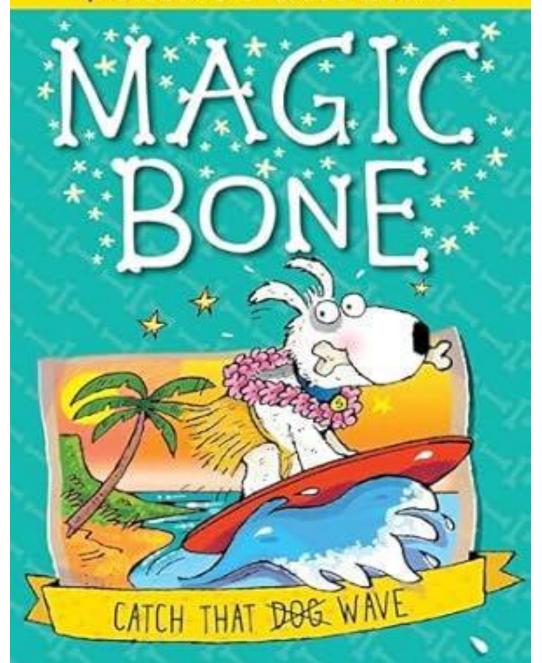




**Call No : Fiction MAH-M** 

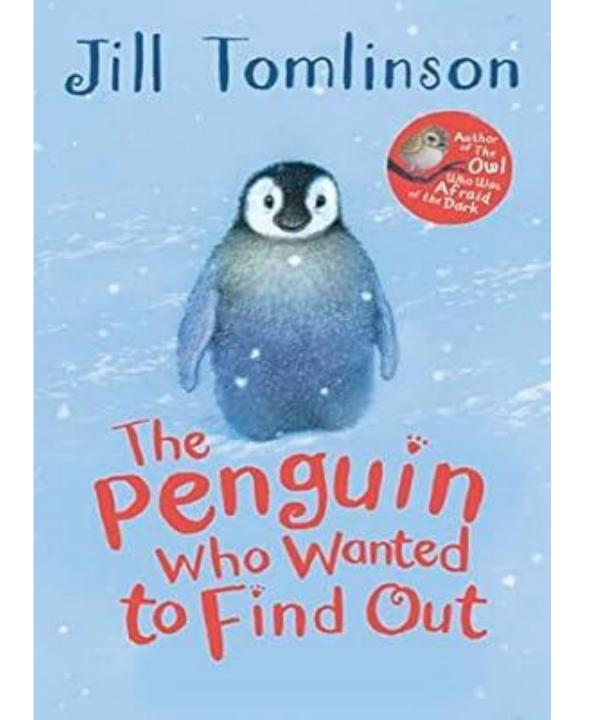
Deep in a forest on the outskirts of Varnavat, the beautiful Hidimbi encounters Bheem, strong and strikingly handsome. The attraction is mutual and instantaneous. But their union seems doomed from the start: she is a rakshasi, a demoness; he is a Pandava, son of Pandu, erstwhile ruler of the fabled kingdom of Hastinapur. It is Kunti, Bheem's mother, who senses an opportunity in this unlikely match. She and her five sons, Yudhishthir, Arjun, Bheem, and the twins Nakul and Sahadev, must remain in exile in the forest for a year before they can do battle with their Kaurava cousins and stake their claim to Pandu's kingdom. What better than to spend the time under the protection of a rakshasi? And if a son is born to her, he will have the strength of a rakshasa a valuable ally in the battle with...





Call No : Fiction KRU-N (Young Learners)

It's time for Sparky to go to school, Obedience School, where he'll learn to sit, heel, come, and stay. But Sparky would rather be anywhere else than school. So what does he do? You guessed it chomp on his magic bone! This time he lands in Hawaii, where he runs along the beach, makes new friends, and even learns to hula. Just as he's ready to go home, though, he finds his new friend in trouble and his magic bone washing out to sea. Read along to see if Sparky will be able to save both his friend and his bone and make it home again. With one bite of his magic bone, Sparky lands on a beach in Hawaii. What's a dog to do? Eat, make friends, eat, learn the hula, eat, surf, and eat! But when the waves get too high, Sparky has to decide if he should rescue a friend or his magic bone. Because without his bone, he'll never get home. What will this dog do? Give this...





**Call No**: Fiction TOM-J (Young Learners)

A heart-warming classic full of animal antics by Jill Tomlinson. Otto is a penguin chick, that much he knows, but other than this, he has a lot to learn. Life at the bottom of the world is a curious thing, and life can change at a moment's notice. The next blizzard, the next meal, and the threat of being orphaned are all challenges that must be faced. But how will Otto and his friends manage? The only thing that penguins can do is look after each other. A perfect story for animal lovers, young and old, filled with tenderness and love combined with a subtle humor. Jill Tomlinson's animal stories have been enjoyed by children who want to snuggle down with a good read for decades. This edition of The Penguin Who Wanted to Find Out is beautifully illustrated by Paul Howard. Otto was a penguin chick. He lived on his father's feet at the bottom of the...

### Links to Access Library Resources / Services

OPAC Link: https://bitspilani-hyd-opac.kohacloud.in/

E-Resources Link: <a href="https://bitspilani-hyd-opac.kohacloud.in">https://bitspilani-hyd-opac.kohacloud.in</a>

Digital Library: http://125.22.54.221:8080/jspui/ (within the Campus)

Old Question Papers: <a href="http://125.22.54.221:8080/jspui/handle/123456789/1">http://125.22.54.221:8080/jspui/handle/123456789/1</a> (within the Campus Only)

Online News Papers: <a href="https://onlinenewspapers.com/india.shtml">https://onlinenewspapers.com/india.shtml</a>

