Engineering Drawing K R Gopalkrishna

The Sasia StoryCALLISTER'S MATERIALS SCIENCE AND ENGINEERING (With CD)Big Data Analytics: Systems, Algorithms, ApplicationsProgramming in COrganizations and Strategies in AstronomyClimate Change and Future Rice Production in IndiaMachine DrawingElements of Mechanical.Engineering (PTU)Information and Communication TechnologiesEngineering DrawingElements of Mechanical EngineeringEnslavedElements of Mechanical EngineeringNew Insights into Parvovirus ResearchBasic Electrical EngineeringAdvances in Thin Films, Nanostructured Materials, and CoatingsEngineering DrawingNano and Bio-Based Technologies for Wastewater TreatmentCHEMICAL PROCESS EQUIPMENTInnovative Pest Management Approaches for the 21st CenturyProceeding of the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS 2017)India's Struggle for IndependenceComputer Aided Engineering Drawing (As Per The Latest Bis Standards Sp: 46-2003) , Third EditionMyforestMechanical EngineeringEngineering DrawingFundamentals of Engineering DrawingElements of Mechanical EngineeringProceedings of the International Conference on Transformations in Engineering EducationElements of MECHANICAL ENGINEERINGElements Of Mechanical Engineering (vtu)Nanoelectronics, Circuits and Communication SystemsPsycho-Social Analysis of the Indian MindsetA

Concise History of Modern IndiaMachine Drawing [In Front-Angle Projection Method]CHEMICAL PROCESS EQUIPMENTProceedings of the International Conference on Data Engineering and Communication TechnologyBasic Mechanical EngineeringEngineering DrawingRequiem for an Assassin

The Sasia Story

CALLISTER'S MATERIALS SCIENCE AND ENGINEERING (With CD)

Engineering Drawing, 2e continues to cover all the fundamental topics of the field, while maintaining its unique focus on the logic behind each concept and method. Based on extensive market research and reviews of the first edition, this edition includes a new chapter on scales, the latest version of AutoCAD, and new pedagogy. The coverage of topics has been made more clear and concise through over 300 solved examples and exercises, with new problems added to help students work progressively through them. Combining technical accuracy with readable explanations, this book will be invaluable to both first-year undergraduate engineering students as well as those preparing for professional exams.

Big Data Analytics: Systems, Algorithms, Applications

Programming in C

India’s struggle for Independence by Bipin Chandra is your go to book for an in-depth and detailed overview on Indian independence movement . Indian freedom struggle is one of the most important parts of its history. A lot has been written and said about it, but there still remains a gap. Rarely do we get to hear accounts of the independence from the entire country and not just one region at one place. This book fits in perfectly in this gap and also provides a narration on the impact this movement had on the people. Bipin Chandra’s book is a well-documented history of India's freedom struggle against the British rule. It is one of the most accurate books which have been painstakingly written after thorough research based on legal and valid verbal and written sources. It maps the first war of independence that started with Mangal Pandey’s mutiny and witnessed the gallant effort of Sri Rani Laxmi Bai. Many of the pages of this book are dedicated to Mahatma Gandhi’s non-cooperation and the civil disobedience movements. It contains detailed description of Subash Chandra Bose’s weapon heavy tactics and his charisma. This book includes all the independence movements and fights, irrespective of their size and impact, covering India in its entirety. Although these movements varied in means and ideas, but they shared a common goal of independence. This book contains oral and written narratives from different parts of the country, making this book historically rich and diverse. The book captures the evolution of Indian independence struggle in full detail and leaves no chapter of this

story untouched. This book is a good read for the students of Indian modern history and especially for students who are preparing for UPSC examination and have taken History as their subject.

Organizations and Strategies in Astronomy

Seated in a sun-lit corner of his 17th century Dutch house, his hand touching a celestial globe, Johannes Vermeer's "Astronomer" seems to pon der about the mysteries of the universe. We might make the trip to Paris and ask him, in the Louvre, what precisely is on his mind. Unfortunately, there will be no answer. But we do know what his mind was not on. It was not on the approaching deadlines for the proposals he would have to write for getting funds and telescope-time, not on the meeting of the observing programs committee, not on his refereeing duty for the journal Astronomy & Astrophysics, nor on his university's tightening budget for science. In the Kapteyn Institute at Groningen I stand face to face with the im pressive portrait of J.C. Kapteyn, painted in the year 1918. Seated at his desk he is doing his calculations with pen, pencil and tables, perhaps check ing the work of his skilled staff of human computers. Early in his career he had completed his magnum opus, the Cape Photographic Durchmusterung in collaboration with his close friend David Gill at Capetown, South Africa.

Climate Change and Future Rice Production in India

Machine Drawing

Elements of Mechanical.Engineering (PTU)

The present book on Elements of Mechanical Engineering is meant for the engineering students of all branches at their first year level.It covers the new syllabus of panjab Technical University,Jalandhar.However,it shall be useful to students of other Universities also.The book covers the basic principles of Thermodynamics,zeroth law of Thermodynamics and the concept of temperature in the first chapter.

Information and Communication Technologies

Engineering Drawing

Basic Mechanical Engineering covers a wide range of topics and engineering concepts that are required to be learnt as in any undergraduate engineering course. Divided into three parts, this book lays emphasis on explaining the logic and physics of critical problems to develop analytical skills in students.

Elements of Mechanical Engineering

In a second edition of their successful Concise History of Modern India, Barbara Metcalf and Thomas Metcalf explore India's modern history afresh and update the events of the last decade. These include the takeover of Congress from the seemingly entrenched Hindu nationalist party in 2004, India's huge advances in technology and the country's new role as a major player in world affairs. From the days of the Mughals, through the British Empire, and into Independence, the country has been transformed by its institutional structures. It is these institutions which have helped bring about the social, cultural and economic changes that have taken place over the last half century and paved the way for the modern success story. Despite these advances, poverty, social inequality and religious division still fester. In response to these dilemmas, the book grapples with questions of caste and religious identity, and the nature of the Indian nation.

Enslaved

Blackmailed by a rogue CIA operative to carry out three assassinations or see his best friend murdered, reluctant killer-for-hire John Rain struggles with numerous moral dilemmas as well as his growing certainty that the operative is hiding a more sinister agenda. 125,000 first printing.

Elements of Mechanical Engineering

This book highlights the latest advances in chemical and physical methods for thin-film deposition and

surface engineering, including ion- and plasma-assisted processes, focusing on explaining the synthesis/processing–structure–properties relationship for a variety of thin-film systems. It covers topics such as advances in thin-film synthesis; new thin-film materials: diamond-like films, granular alloys, high-entropy alloys, oxynitrides, and intermetallic compounds; ultra-hard, wear- and oxidation-resistant and multifunctional coatings; superconducting, magnetic, semiconducting, and dielectric films; electrochemical and electroless depositions; thin-film characterization and instrumentation; and industrial applications.

New Insights into Parvovirus Research

This book comprises the proceedings of the International Conference on Transformations in Engineering Education conducted jointly by BVB College of Engineering & Technology, Hubli, India and Indo US Collaboration for Engineering Education (IUCEE). This event is done in collaboration with International Federation of Engineering Education Societies (IFEES), American Society for Engineering Education (ASEE) and Global Engineering Deans' Council (GEDC). The conference is about showcasing the transformational practices in Engineering Education space.

Basic Electrical Engineering

This text introduces the student to the practices and standards of making drawings for equipment used in

chemical industries. The textbook follows the Bureau of Indian Standards (BIS) 696–1972 specifications and methodology of equipment drawings. It uses the symbolic representations of the equipment as used in the industry and provides the detailed drawings of some commonly used equipment. It includes numerous orthographic and assembled views of equipment, and provides several photographs to relate these drawings to equipment used in industries. Finally, the book includes several assignments to reinforce the concepts discussed in the text. The text is intended for the undergraduate students of chemical engineering and its related branches such as polymer engineering, petroleum engineering, and pipeline engineering.

Advances in Thin Films, Nanostructured Materials, and Coatings

This book explains in depth the issues and challenges faced by rice farmers in India in relation to production and productivity, and the possible adaptation strategies to climate change. Based on five years of groundbreaking research on emerging trends in cultivation in major rice growing regions in India, it begins by describing production and yield trends across different rice growing regions. It then offers a comprehensive review of relevant literature and the quantification methodologies and approaches used to analyze the impact of climate change. The book also analyzes climate change impacts on rice productivity and production, applying field-tested quantification methods, such as the Just-Pope production function

where time series and cross-section data are simultaneously used for all regions. The results are presented for five geographical regions of India – northern, eastern, western, central and southern – for better comparison and readability. The analyses cover scenarios for both mid-century (2021–2050) and end-century (2071–2100), and in the context of climate change, they also incorporate both medium and high carbon emission scenarios. Thus the future rice production and productivity trends are clearly projected for making necessary interventions. Lastly, the book outlines the essentials of an enabling environment policy and discusses the institutional and policy options necessary to ensure sustainable rice production in India. It also makes the case for introducing appropriate and affordable adaptation strategies to support farmers in different rice-growing regions. The cost–benefit analysis of strategies presented in this book provides an invaluable tool for officials at agriculture departments planning up-scaling of agricultural productivity. The projections are also useful for policy makers and planners developing future investment plans to support rice production in their country. Overall, this book is of interest to a wide audience, including professionals and business enterprises dealing with rice, as well as to academic researchers and students.

Engineering Drawing

This two-volume book contains research work presented at the First International Conference on Data Engineering and Communication Technology

(ICDECT) held during March 10–11, 2016 at Lavasa, Pune, Maharashtra, India. The book discusses recent research technologies and applications in the field of Computer Science, Electrical and Electronics Engineering. The aim of the Proceedings is to provide cutting-edge developments taking place in the field data engineering and communication technologies which will assist the researchers and practitioners from both academia as well as industry to advance their field of study.

Nano and Bio-Based Technologies for Wastewater Treatment

CHEMICAL PROCESS EQUIPMENT

Several Integrated Pest Management (IPM) approaches are available for managing pests of varied kinds, including individual and integrated methods for pest suppression. Recently the focus has shifted to pest management tools that act on insect systems selectively, are compatible with the environment, and are not harmful for ecosystems. Other approaches target specific biochemical and physiological aspects of insect metabolism, and involve biotechnological and genetic manipulation. Still other approaches include the use of nanotechnology, endophytes, optical and sonic manipulation to detect and control pest insects. Unfortunately, conventional forms of pest management do not focus on technology transfer to the ground level workers and farmers. As a result,

farmers are incurring huge losses of crops and revenues. This book highlights the importance of using communication tools in pest management and demonstrates some success stories of utilizing automated unmanned technologies in this context. The content is divided into three sections, the first of which, “Pest Population Monitoring: Modern Tools,” covers long and short-range pest population monitoring techniques and tools such as satellites, unmanned aerial vehicles/drones, remote sensing, digital tools like GIS, GPS for mapping, lidar, mobile apps, software systems, artificial diet designs and functional diversity of info-chemicals. The second section of the book is devoted to “Emerging Areas in Pest Management” and offers a glimpse of diversified tactics that have been developed to contain and suppress pest populations such as endophytes, insect vectors of phytoplasma, Hymenopterans parasitoids, mass production and utilization of NPV etc. In turn, the third section focuses on “Integrated Pest Management” and presents farming situations that illustrate how research in diversified aspects has helped to find solutions to specific pest problems, and how some new and evolving tactics can be practically implemented. Given its scope, the book offers a valuable asset for entomology and plant pathology researchers, students of zoology and plant protection, and readers whose work involves agriculture, horticulture, forestry and other ecosystems.

Innovative Pest Management Approaches for the 21st Century

This book constitutes the proceedings of the International Conference on Information and Communication Technologies held in Kochi, Kerala, India in September 2010.

Proceeding of the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS 2017)

Viruses in the Parvoviridae family constitute one of the most diverse and intriguing fields of research. While they all share an ssDNA genome and a small capsid, they can differ widely in structure, genome organization and expression, virus–cell interaction, and impact on the host. Exploring such diversity and unraveling the inherent complexity in these apparently simple viruses is an ongoing endeavor and commitment for the scientific community. The translational implications of research on parvoviruses are relevant. Within the family, some viruses are important human and veterinary pathogens, in need of diagnostic methods and antiviral strategies; other viruses have long been studied and engineered as tools for oncolytic therapy, or as sophisticated gene delivery vectors, and can now display their wide and expanding applicative potential. This Special Issue of Viruses collects recent contributions in the field of parvovirus research, with a focus on new insights and research on unresolved issues, as well as new approaches exploiting systemic methodologies. Evolution, structural biology, viral replication, virus–host interaction, pathogenesis and immunity,

and viral oncotherapy are a selection of the topics addressed in the issue that can be of relevance to the community involved in parvovirus research and of interest to a wider audience.

India's Struggle for Independence

Illustrates common library functions with program codes and test cases, highlights possible problem areas, and provides exercises for learning to program in C.

Computer Aided Engineering Drawing (As Per The Latest Bis Standards Sp: 46-2003) , Third Edition

About the Book: Written by three distinguished authors with ample academic and teaching experience, this textbook, meant for diploma and degree students of Mechanical Engineering as well as those preparing for AMIE examination, incorporates the latest st

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This book provides a comprehensive survey of techniques, technologies and applications of Big Data and its analysis. The Big Data phenomenon is increasingly impacting all sectors of business and industry, producing an emerging new information ecosystem. On the applications front, the book offers detailed descriptions of various application areas for Big Data Analytics in the important domains of Social

Semantic Web Mining, Banking and Financial Services, Capital Markets, Insurance, Advertisement, Recommendation Systems, Bio-Informatics, the IoT and Fog Computing, before delving into issues of security and privacy. With regard to machine learning techniques, the book presents all the standard algorithms for learning – including supervised, semi-supervised and unsupervised techniques such as clustering and reinforcement learning techniques to perform collective Deep Learning. Multi-layered and nonlinear learning for Big Data are also covered. In turn, the book highlights real-life case studies on successful implementations of Big Data Analytics at large IT companies such as Google, Facebook, LinkedIn and Microsoft. Multi-sectorial case studies on domain-based companies such as Deutsche Bank, the power provider Opower, Delta Airlines and a Chinese City Transportation application represent a valuable addition. Given its comprehensive coverage of Big Data Analytics, the book offers a unique resource for undergraduate and graduate students, researchers, educators and IT professionals alike.

Mechanical Engineering

Over the past few decades the boom in the industrial sector has contributed to the release in the environment of pollutants that have no regulatory status and which may have significant impact on the health of animals and humans. These pollutants also refer as “emerging pollutants” are mostly aromatic compounds which derive from excretion of pharmaceutical, industrial effluents and municipal

discharge. Some form of pollutions have also evolved, including the proliferation of acid mine drainage from oxidation or weathering of obsolete and unmanaged excavations around the world; this results mostly in the dispersion of inorganic pollutants in the environment at level surpassing the treatment capacity of conventional techniques. It is recurrent these days to find water treatment plants which no longer produce water that fits the purpose of domestic consumption based on newly established guidelines. This situation has prompted water authorities and researchers to develop tools for proper prediction and control of the dispersion of pollutants in the environment to ensure that appropriate measures are taken to prevent the occurrence of outbreaks due to sudden load of these pollutants in the water system. The chapters in this book cover a wide range of nano and bio-based techniques that have been designed for the real time detection of emerging contaminants in environmental water sources, geochemical models that are continuously improved for the prediction of inorganic contaminants migration from the mine solid wastes into ground and surface waters. Remediation strategies are also discussed and include effective techniques based on nanotechnology, advanced membrane filtration, oxidative and bio- degradation processes using various types of nanocatalysts, biocatalysts or supporting polymer matrices which are under advanced investigations for their implementation at large scale for the removal of recalcitrant pollutants from polluted water. This book is divided is two sections, the first section covers the occurrence of emerging pollutants in environmental

water while the second section covers state of the art research on the removal of emerging pollutants from water using sustainable technologies. A total of 13 chapters addressing various topics related to the two sections are essentially based on recent development in the respective field which could have a significant impact on the enhancement of the performance of wastewater treatment plants around the world and especially in developing countries where access to clean and safe water remains a daily challenge

Engineering Drawing

Fundamentals of Engineering Drawing

Elements of Mechanical Engineering

Electrical EngineeringEssence of electricity, Conductors, Semiconductors and insulators (elementary treatment only); Electric field, electric current, Potential and potential difference, Electromotive force, Electric power, Ohm's law, Basic circuit components, Electromagnetism related laws, Magnetic field due to electric current flow, Force on a current carrying conductor placed in a magnetic field, Faradays laws of electromagnetic induction. Types of induced EMF's, Kirchhoff's laws, Simple problems.Network AnalysisBasic definitions, Types of elements, types of sources, Resistive networks, Inductive networks, Capacitive networks, Series parallel circuits, Star delta and delta star

transformation, Network theorems-Superposition, Thevenins's, Maximum power transfer theorems and simple problems.Magnetic CircuitsBasic definitions, Analogy between electric and magnetic circuits, Magnetization characteristics of Ferro magnetic materials, Self inductance and mutual inductance, Energy in linear magnetic systems, Coils connected in series, Attracting force or electromagnets.Alternating QuantitiesPrinciple of ac voltages, Waveforms and basic definitions, Relationship between frequency, Speed and number of poles, Root mean square and average values of alternating currents and voltage, form factor and peak factor, Phasor representation of alternating quantities, The J operator and phasor algebra, analysis of ac circuits with single basic network element, single phase series circuits, Single phase parallel circuits, Single phase series parallel circuits, Power in ac circuits.TransformersPrinciples of operation, Constructional details, Ideal Transformer and Practical Transformer, Losses, Transformer Test, Efficiency and Regulation Calculations.Direct current machinesPrinciple of operation of dc machines, Armature windings, E.M.F. equation in a dc machine, Torque production in a dc machine, Operation of a dc machine as a generator, Operation of a dc machine as a motor.A.C. MachinesThree phase induction motor, principle of operation, Slip and rotor frequency, Torque (simple problems).Synchronous MachinesPrinciple of operation, EMF equation (Simple problems on EMF). Synchronous motor principle and operation (Elementary treatment only)Basic InstrumentClassification of instruments, Operating principles, Essential features of measuring instruments, Moving coil permanent magnet (PMMC)

instruments, Moving Iron of Ammeters and Voltmeters (elementary treatment only).

Proceedings of the International Conference on Transformations in Engineering Education

Market_Desc: Materials Scientists, Engineers, and Students of Engineering. Special Features: · It synchronizes contents with the sequence of topics taught in materials science and engineering courses in most universities in South Asia, while retaining the subject material of the seventh edition.· Materials of Importance pieces in most chapters provide relevance to the subject material.· Updated discussions on metals, ceramics and polymers.· Concept check questions test conceptual understanding.· CD-ROM packaged with the book contains the last five chapters in the book, answers to concept check questions and solutions to selected problems.· Virtual Materials Science and Engineering in CD-ROM to expedite learning process.· Integrates numerous examples throughout the chapters that show how the material is applied in the real world.· Professor Balasubramaniam was the recipient of several awards like the Indian National Science Academy Young Scientist Award (1993), Alexander von Humboldt Foundation fellowship (1997), Best Metallurgist Award by the Ministry of Steels and Mines and the Indian Institute of Metals (1999) and the Materials Research Society of Indian Medal (1999) and recently Distinguished Educator of the Year (2009). About The Book: Building on the success of previous edition, this

book continues to provide engineers with a strong understanding of the three primary types of materials and composites, as well as the relationships that exist between the structural elements of materials and their properties. With improved and more interactive learning modules, this textbook provides a better visualization of the concepts. Apart from serving as a text book for the basic course in materials science and engineering in engineering colleges, the book covers topics that can be used to advantage even in specialized courses pertaining to engineering materials. The book can be consulted as a good reference source for important properties of a wide variety of engineering materials, which benefits a wide spectrum of future engineers and scientists.

Elements of MECHANICAL ENGINEERING

Elements Of Mechanical Engineering (vtu)

This volume situates Indians in the contemporary world and profiles the major facets of their thought and behaviour; then goes back to trace their roots to ancient thought to see how the past predisposes and the present guides Indians in their everyday life. The volume begins with a conceptual framework showing how the Indian worldview has encompassed and enveloped a variety of ideas and influences from divergent sources. As a result, Indians are both collectivists and individualists, hierarchically oriented while respecting merit and quality, religious as well as

secular and sexually indulgent, spiritual as well as materialists, excessively dependent but remarkably entrepreneurial, non-violent in principle but violent in practice and comfortable in shifting between analytical, synthetic as well as intuitive approaches to reality. Such a coexistence of opposites often causes inaction, hesitation and perfunctory action, but also equips Indians to be innovative by continuously aligning their thought and behaviour to the demands of a milieu. The milieu has an inner layer consisting of desh (place), kaal (time) and paatra (person), which are embedded in the larger societal contexts of castes and classes, poverty, corruption, fragmenting politics, conflicts and violence and unfolding global opportunities and challenges. Cultural heritage permeates in all these. Indians function in this tiered, multifactorial, dynamic space. This volume draws evidence from ancient texts and the latest national and international research, many of which were conducted by the author and his associates. It does not, however, hesitate to indulge in anecdotal evidence, cases and speculative ideas in order to complete the picture. The author takes an in-depth view of the Indian mindset without getting the reader lost in either the intricacies of ancient philosophical abyss or the trivialities of present-day non-events.

Nanoelectronics, Circuits and Communication Systems

Psycho-Social Analysis of the Indian Mindset

This text introduces the students and practicing engineers to the practices and standards of drafting the equipment used in chemical, food processing, polymer engineering, and pharmaceuticals processing industries. The textbook follows the Bureau of Indian Standards BIS 696–1972 specifications and methodology of equipment drawing. It introduces to the symbolic representations of the equipment as used in the chemical, food processing and pharma industries. It provides the detailed drawings of some commonly used equipment that are repeatedly used in different sizes and shapes. Orthographic and assembled views are illustrated. Several assignments have been suggested for practicing the drawing. In this second edition, a new chapter on computerized drawing method has been introduced. For this solid edge software has been used. Though the software itself guides the readers through the making of drawing of the parts and their assemblies, guidelines to use software is also given. The text is intended for the undergraduate students of chemical and its related branches such as polymer engineering, petroleum engineering and pipeline engineering.

A Concise History of Modern India

Machine Drawing [In Front-Angle Projection Method]

In Computer Aided Engineering Drawing, the author draws upon his vast experience of teaching and presents a student friendly step-by-step

demonstrative approach, similar to that of classroom teaching. Key Features: * Use of updated B.I.S. conventions. * Incorporates standard assumptions in case of incomplete data by framing special problems. * Introduces various softwares for computer-aided engineering darwings. * Includes solved problems using different methods. * A concise summary at the end of each chapter for quick revision. * Includes solutions to difficult problems using 3-D diagrams. * Examination problems of VTU and other universities have been included in the exercise section for practice. Hints have been given to solve the problems where necessary. * The complete book has been written with classroom teaching approach.

CHEMICAL PROCESS EQUIPMENT

Travelogue, covering South Asia.

Proceedings of the International Conference on Data Engineering and Communication Technology

The volume presents high quality papers presented at the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS 2017). The book discusses recent trends in technology and advancement in MEMS and nanoelectronics, wireless communications, optical communication, instrumentation, signal processing, image processing, bioengineering, green energy, hybrid vehicles, environmental science, weather forecasting, cloud computing, renewable energy,

RFID, CMOS sensors, actuators, transducers, telemetry systems, embedded systems, and sensor network applications. It includes original papers based on original theoretical, practical, experimental, simulations, development, application, measurement, and testing. The applications and solutions discussed in the book will serve as a good reference material for future works.

Basic Mechanical Engineering

Engineering Drawing

Where are all the real men? she wondered For Lady Diana Davenport, they existed only in her books and dreams. There she could lose herself, becoming the licentious Diana, goddess of the hunt--far from the rigid restraints of eighteenth-century London, where she was courted by fops and fools. That is, until she tried on an authentic Roman helmet in an antiques store and was catapulted back in time, landing in Marcus Magnus's arms. This was no dream! She was lost in Aquae Sulis, the city she knew as Bath, prisoner of a Roman general who accused the violet-eyed beauty of being a Druid spy--and then made her his slave! "COME TO ME." His words were soft, imperious, charged with danger and desire. Marcus Magnus was powerful, arrogant, and infuriating. A real man. And now Lady Diana was his slave, hostage to his will, vowing to fight him to the end--with every seductive weapon she possessed. Virginia Henley is the author of eight romances published by Dell,

including the New York Times bestsellers Seduced and Desired. She divides her time between Ontario, Canada, and St. Petersburg, Florida. From the Paperback edition.

Requiem for an Assassin

This book provides a comprehensive and wide-ranging introduction to the fundamental principles of mechanical engineering in a distinct and clear manner. The book is intended for a core introductory course in the area of foundations and applications of mechanical engineering, prescribed for the first-year students of all disciplines of engineering. The book develops an intuitive understanding of the basic principles of thermodynamics as well as of the principles governing the conversion of heat into energy. Numerous illustrative examples are provided to fortify these concepts throughout. The book gives the students a feel for how thermodynamics is applied in engineering practice in the areas of heat engines, steam boilers, internal combustion engines, refrigeration and air conditioning, and to devices such as turbines, pumps and compressors. The book also provides a basic understanding of mechanical design, illustrating the principles through a discussion of devices designed for the transmission of motion and power such as couplings, clutches and brakes. No book on basic mechanical engineering is complete without an introduction to materials science. The text covers the treatment of the common engineering materials, highlighting their properties and applications. Finally, the role of lubrication and

lubricants in reducing the wear and tear of parts in mechanical systems, is lucidly explained in the concluding chapter. The text features several fully worked-out examples, a fairly large number of numerical problems with answers, end-of-chapter review questions and multiple choice questions, which all enhance the value of the text to the students. Besides the students studying for an engineering degree, this book is also suitable for study by the students of AMIE and the students of diploma level courses.

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