

# Fundamentals of Electrical and Electronics Engineering (with Lab Manual)

**Author:** Saji T. Chacko

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### **Product Description**

"Fundamentals of Electrical & Electronics Engineering" is a compulsory paper for the first year Diploma course in Engineering & Technology Syllabus of this book is strictly aligned as per model curriculum of AICTE, and academic content is amalgamated with the concept of outcome based education. Books covers six topics- Overview of Electronics Components and Signals. Overview of Analog Circuits. Overview of Digital Electronics, Electric and magnetic Circuits, A.C. Circuits and Transformer and Machines. Each topic is written is easy and lucid manner. A set of exercises at the end of each units to test the student's comprehension is provided. Some salient features of the book: 1. Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes. 2. The practical applications of the topics are discussed along with micro projects and activities for generating further curiosity as well as improving problem solving capacity. 3. Book provides lots of vital facts, concepts, principles and other interesting information. 4. QR Codes of video resources and websites to enhance use of ICT for relevant supportive knowledge have been provided. 5. Student and teacher centric course materials included in book in balanced manner. 6. Figures, tables, equations and comparative charts are inserted to improve clarity of the topics. 7. Objective questions and subjective questions are given for practices of students at the end of each unit. Solved and unsolved problems including numerical examples are solved with systematic steps.



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Unit 2: Overview of Analog Circuits.

**Unit 3:** Overview of Digital Electronics.

**Unit 4:** Electric and Magnetic Circuits.

Unit 5: AC Circuits.

Unit 6: Transformer and Machines.

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### **Authors**

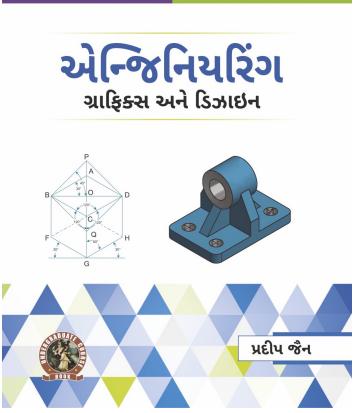
Susan S. Mathew, Saji T. Chacko



AICTE દ્વારા નિર્ધારિત થયેલ મોડલ અભ્યાસક્રમ મુજબનું પાઠ્યપુસ્તક

પરિણામ આધારિત શિક્ષણ સાથે સંરેખિત

રાષ્ટ્રીય શિક્ષણ નીતિ 2020



# **Engineering Graphics & amp; Design**

**Author:** Pradeep Jain

**ISBN 13:** 978-93-55381-58-3

**ISBN 10:** 93-55381-58-1

**E-ISBN 13:** 978-93-55381-58-3

**Edition:** First

**Pages:** 256

**Type of book:** Paperback

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**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725732294

**Condition Type:** New

Country Origin: India

### **Product Description**

This textbook "Engineering Graphics and Design" is based on the latest outcome based model curriculum of the AICTE. The book covers complete syllabus catering requirements of all major technical universities and institutes and provides insights into traditional engineering graphics as well as treats of the subject using 2D and 3D design software. It offers technical details, current standard, real world examples and clearly explains theory and technique in highly visual and concise format. The topic covered in this book are arranged into 9 chapters comprising self-explanatory diagrams and solved examples. Salient Features: 1. Introduction of Engineering Drawing. 2. Orthographic Projection. 3. Projection of Solids. 4. Section of Solids and Development of Surfaces. 5. Isometric Projection. 6. Overview of Computer Graphics. 7. CAD Drawing. 8. Solid Modelling. 9. Team Design Project.



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Chapter 3: Projection of Solids. Chapter 4: Sectional Views of Solids. Chapter 5: Isometric

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Chapter 8: Annotation Layers and 3D Modelling. Chapter 9: Projects.

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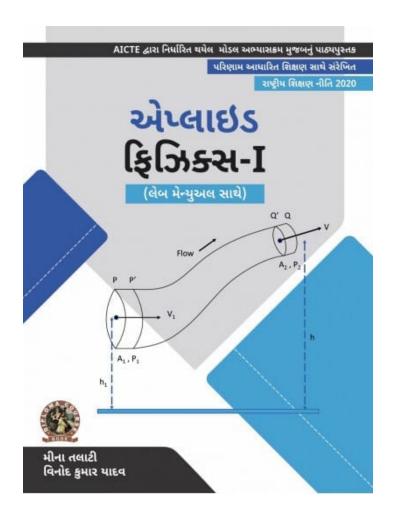
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### **Author**

**Pradeep Jain** has 15 years of experience in teaching and industry in CAD/CAM. presently he is working as an associate professor in the Department of Mechanical Engineering, Ajay Kumar Garg Engineering College, Ghaziabad. He is providing training and consultancy in CAD/ CAM field.





# **Applied Physics-I (with Lab Manual)**

**Author:** Mina Talati

**ISBN 13:** 978-93-55380-11-1

**ISBN 10:** 93-55380-11-9

**E-ISBN 13:** 978-93-55380-11-1

**Edition:** First

**Pages:** 200

**Type of book :** Paperback

Weight (g): 280.00

**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725623623

**Condition Type:** New



### **Product Description**

"Applied Physic-I" is a compulsory paper for the first year Diploma course in Engineering & Technology. Syllabus of this books is strictly aligned as per model curriculum of AICTE, and academic content is amalgamated with the concepts of outcome-based education. Book covers six topics- Physical World, Units and Measurements; Force and Motion; Work, Power and Energy; Rotational Motion; Properties of Matter; Heat and Thermometry. Each topic is written in easy and lucid manner. Every chapter contains a set of exercise at the end of each unit to test the student's comprehension. Some salient features of the book: 1. Content of the book is aligned with the mapping of Course Outcome, Programs Outcomes and Unit Outcomes. 2. Book provides lots of interested facts, QR Code for E-resources, QR Code for use of ICT etc. 3. Students and teacher centric subject materials are included in book with balanced and chronological manner. 4. Figures and tables are inserted to improve clarity of the topics. 5. Short questions, objective questions and long answer exercises of different difficulty levels are given for practice—after every chapter. 6. Solved numerical examples are provided with systematic steps in each chapter followed by numerical exercises with hints.

### **Table of Contents**

Unit 1: Physical World, Units and Measurements.

Unit 2: Force and Motion.

Unit 3: Work, Power and energy.

Unit 4: Rotational Motion.

**Unit 5:** Properties of Matter.

Unit 6: heat and Thermometry.

**Annexes** 

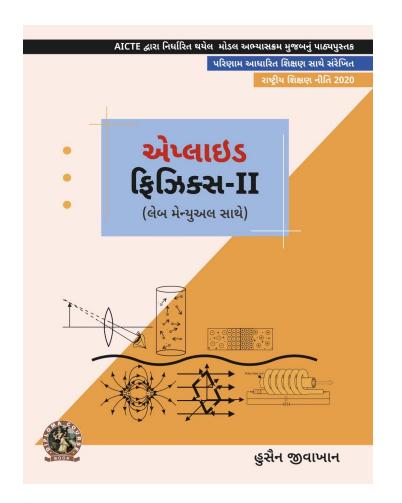
**Appendices** 

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# Authors V. K. Yadav Mina Talati





# **Applied Physics-II (with Lab Manual)**

**Author:** Hussain Jeevakhan

**ISBN 13:** 978-93-55380-51-7

**ISBN 10:** 93-55380-51-8

**E-ISBN 13:** 978-93-55380-51-7

**Edition:** First

**Pages:** 272

**Type of book :** Paperback

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**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725549030

**Condition Type:** New



### **Product Description**

"Applied Physics-II" is a basic science course in the first year of the Diploma program in Engineering & Technology.

Contents of this book are stringently aligned as per model curriculum of AICTE and incorporated with the concepts of outcomes-based education (OBE). Book covers seven topics- Wave motion, Optics, Electrostatics, Current electricity, Electromagnetism, semiconductor physics and Modern physics. Each topic and its subtopics are written from the perspective of a student's learning and in accord with the NEP 2020 guidelines. Every unit comprises a set of activities and exercise at the end to assist the student's learning. Some salient features of the book:

1. Unit Outcomes of each unit are mapped with Course Outcomes and Programs outcomes. 2. Book Provides relevant interesting facts, QR Code for E-resources and use of ICT and suggested micro projects activities in each unit. 3. Content presented in book in chronological way. 4. Figures, tables and equations are given to improve clarity of the topics. 5. Solved examples are given with systematic steps. 6.

MCQ's, short and long answer questions and unsolved problems of understanding and above levels (Bloom's Taxonomy) are given for learning reinforcement of students and as per OBE.



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**Chapter 1:** Wave Motion and its applications.

**Chapter 2:** Optics.

**Chapter 3:** Electrostatics.

**Chapter 4:** Current Electricity.

**Chapter 5:** Electromagnetism.

Chapter 6: Semiconductor physics.

Chapter 7: Modern physics.

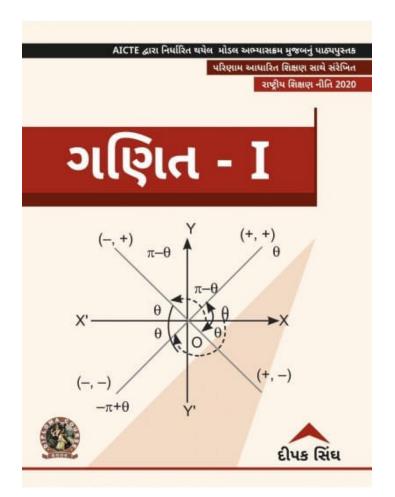
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### **Author**

Hussain Jeevakhan



### K H A N N A B O O K S . C O M



### **Mathematics-I**

**Author:** Deepak Singh

**ISBN 13:** 978-93-55380-03-6

**ISBN 10:** 93-55380-03-8

**E-ISBN 13:** 978-93-55380-03-6

**Edition:** First

**Pages:** 180

**Type of book :** Paperback

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**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725735736

**Condition Type:** New



### **Product Description**

"Mathematics-I" is included as a paper for the first year Diploma program. Syllabus of this book is strictly aligned as per model curriculum of AICTE, and academic content is combined with the concept of outcome-based education. Book cover five Units Trigonometry, Functions and Limit, Differential Calculus, Complex numbers and partial Fraction, Permutation and Combination and Binomial Theorem. In every unit each topic is written in easy and lucid manner. A set of exercise at the end of each unit is clubbed to test the student's comprehension. Some salient features of the book: · Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes. · Book provides lots of real-world applications, interesting facts, QR Code for E-resources, mini projects, curiosity topics, sample specification table etc. · Students and teacher centric subject materials included in book with balanced and chronological manner. · Figures, tables and mathematical equations are inserted to improve clarity of the topics. · Short questions, objective questions and long answer exercises are given for practice of students after every chapter. · Comprehensive synopsis of formulae for a quick revision of the basic principles.

### **Table of Contents**

**Chapter 1:** Trigonometry.

**Chapter 2:** Functions and Limit.

**Chapter 3:** Differential Calculus.

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**References for Further Learning** 

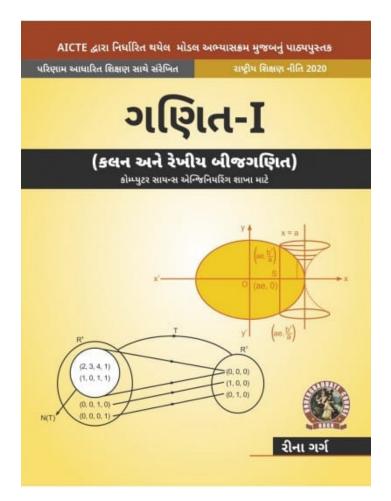
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### **Author**

**DEEPAK SINGH** 





### Mathematics - I (Calculus and Linear Algebra) For Computer Science Engineering Branches

**Author:** Reena Garg

**ISBN 13:** 978-93-55381-74-3

**ISBN 10:** 93-55381-74-3

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**Edition :** First

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**Publisher:** Khanna Publishing House

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Ebooks, Gujarati Books

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**Condition Type:** New

**Categories:** 



### **Product Description**

Calculus and Linear Algebra cover all the modules prescribed by AICTE model curriculum to all the 1st year CSE students studying in engineering institutions and universities of the country. It serves as both text book /or useful reference work. It contains 5 units which included calculus, Algebra and vector spaces along with their applications. This renowned and well respected title provides in one handy volume with the essential mathematical tools that help in understanding the subject and problem solving techniques with many real life engineering applications. As per trademark of AICTE. This book is in student's friendly style, author has endeavored enormous efforts in providing numerous solved examples and exercise under each topic to facilitate better understanding of the concepts to the students. Majority of questions in this book have been designed to access the reader's understanding of the subject professionals or those who are preparing for competitive examinations will also find this book very useful. This book will give the students a complete grasp of the mathematical skills that are needed by engineers all over the country. Some Salient Features of the Book: 1. In depth coverage of all related, essential and mentioned topics as per AICTE in simple presentation with clarity and accuracy. 2. Emphasis on the applications of concepts and theorems. 3. Core concepts are presented through a large number of solved graded model examples in an innovative and lucid manner. 4. A good number of relatively competitive problems are given at the end of each unit in the form of short questions, HOTS, assignments, MCQs and know more for student's practices purpose. Practical /Projects/ Activity also given in each unit for enhancing the student's capability, to increase the feeling of team work. 5. To clarify the subject, the text has been supplemented through Notes, Observations and Remarks; an attempt has been made to explain the topic through maximum use of geometries wherever possible. 6. Some standard problems with sufficient hints have been included in each exercise to gauge the student's visual understanding and for grasp the theory.



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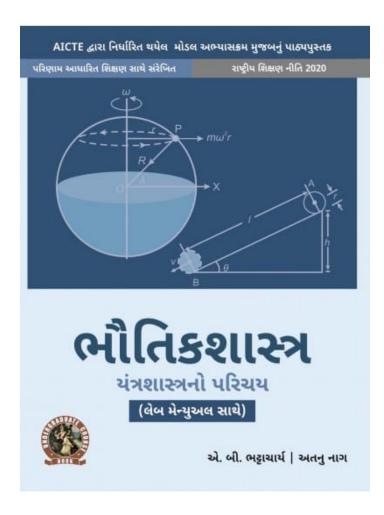
**CO and Po Attainment Table.** 

### **Author**

### Reena Garg

Dr. Reena Garg, M.Sc. Mathematics (Gold Medalist), M.Phil, Ph.D is Assistant Professor (Mathematics) in YMCA University of Science & Technology, Faridabad (Haryana). She also taught in C.I.T.M. Faridabad (presently known as Manav Rachna International University, Faridabad). Her teaching experience of more than a decade has made this book more valuable for the knowledge seekers. She has published more than 10 research papers in various International Journals. She is a life-time member of Forum of Inter-disciplinary mathematics in India. She is a member of reviewer Board in IJRET, Bangalore.





# Physics (Introduction to Mechanics) (with Lab Manual)

**Author:** A. B. Bhattacharya

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**ISBN 10:** 93-55381-66-2

**E-ISBN 13:** 978-93-55381-66-8

**Edition:** First

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Weight (g): 330.00

**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725754182

**Condition Type:** New



### **Product Description**

Engineering Physics: Introduction to Electromagnetic Theory has been written for the first year students of B. Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student's needs Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Electromagnetic Theory to tackle 21st century and onward engineering challenges and address the related questions. Some Salient Features of the Book: 1. Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject. 2. To develop knowledge on critical questions, solved and supplementary problems covering all types of medium and advanced level problems in a very logical and systematic manner. 3. Some essential information for the users under the heading "know More" for clarifying some basic. 4. Information as well as comprehensive synopsis of formulae for a quick revision of the basic principles. 5. Constructive manner of presentation so that an Engineering degree students can prepare to work in different sector or in national laboratories at the very forefront of technology.



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Unit 6: Maxwell's Equations.

**Unit 7:** Electromagnetic Waves.

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**Appendices** 

**Annexures** 

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### **Authors**

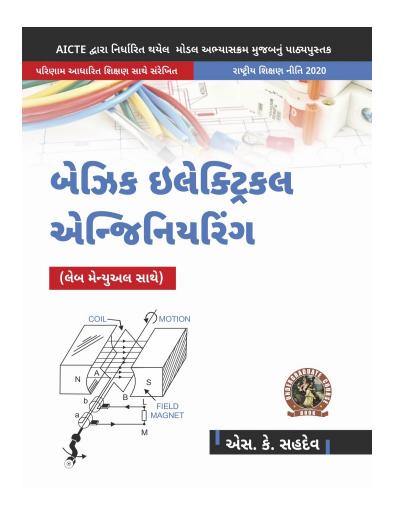
### A. B. Bhattacharya

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers.

### A. Nag

Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.





# **Basic Electrical Engineering** (with Lab Manual)

**Author:** S. K. Sahdev

**ISBN 13:** 978-93-55381-59-0

**ISBN 10:** 93-55381-59-X

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**Pages:** 376

**Type of book:** Paperback

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**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725776906

**Condition Type:** New

**Country Origin:** India

### **Product Description**

This textbook "Basic Electrical Engineering" is based on the latest syllabus of the Universities AICTE and Educational Institutes. In this edition, some material of the book has been rewritten to make the presentation easily comprehensible. More illustrative examples mainly from IAS, IES and GATE and other competitive examinations have been added. Various problems with answers have been added to support the text. For quick revision, summary/ highlights are given at the end of each chapter. Salient Features: 1. DC Circuits. 2. AC Circuits. 3. Transformers. 4. Electrical Machines. 5. Power Converters. 6. Electrical Installations.



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Chapter 1: DC Circuits.

Chapter 2: AC Circuits. Chapter 3: Transformers. Chapter 4: Electrical Machines. Chapter

5: Power Converters. Chapter 6: Electrical Installations.

### **Author**

S. K. SAHDEV









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## **Engineering Workshop Practice**

**Author:** A. K. Sarathe

**ISBN 13:** 978-93-55380-35-7

**ISBN 10:** 93-55380-35-6

**E-ISBN 13:** 978-93-55380-35-7

**Edition:** First

**Pages:** 164

**Type of book :** Paperback

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**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

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Ebooks, Gujarati Books

**SKU:** 1725756170

**Condition Type:** New



### **Product Description**

"Engineering Workshop Practice Manual" is a common paper for the first year Diploma course in Engineering & Technology. Syllabus of this book is strictly aligned as per model curriculum of AICTE and academic content is amalgamated with the concept of outcome based education. Engineering Workshop Practice manual covers five units- First unit deals with the carpentry, second unit is about fitting, third unit focuses on welding, fourth units discusses about sheet metal working and the fifth unit deals with electrical house wiring. The manual comprises of total seventeen workshop practical from P1 to P17 and the same are arranged in hierarchical manner from simple to complex so that students should not only focus on completing the practical and getting the marks/ grades but will also be motivated to create useful products incorporating their creative and critical thinking as well. Some salient features of the book: 1. Content of the manual aligned with the mapping of Course Outcomes, Programs Outcomes and practical outcomes. 2. Relevant theory has been included at the beginning of each practical. 3. The manual has been developed to ensure alignment with the Outcome Based Education philosophy and consisting of total seventeen workshop practical. 4. Unit wise practical are arranged in hierarchical manner from simple to complex. 5. Manual provides recent information and QR Code for E-resources etc. 6. Figures, photographs and table are inserted to improve clarity of the content.



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**UNIT 1:** Carpentry.

**UNIT 2:** Fitting.

**UNIT 3:** Welding Tools and Equipment.

**UNIT 4:** Sheet Metal Working.

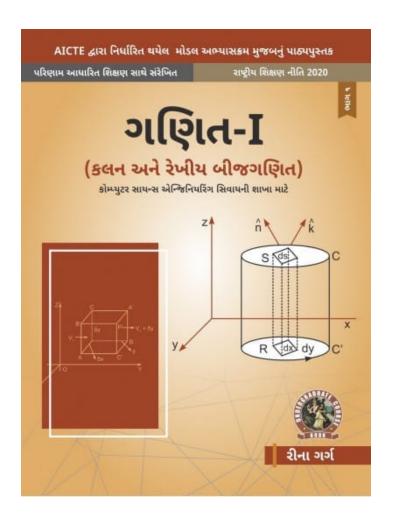
**UNIT 5:** Electrical House wiring.

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### **Author**

A. K. Sarathe





### Mathematics - I (Calculus and Linear Algebra) For Non-Computer Science Engineering Branches

**Author:** Reena Garg

**ISBN 13:** 978-93-55381-69-9

**ISBN 10:** 93-55381-69-7

**E-ISBN 13:** 978-93-55381-69-9

**Edition:** First

**Pages:** 656

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**Language:** Gujarati

**Publisher:** Khanna Publishing House

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Ebooks, Gujarati Books

**SKU:** 1725602754

**Condition Type:** New



### **Product Description**

Calculus, Multivariable Calculus and Linear Algebra covers all the Modules prescribed by AICTE. Model curriculum to all the 1st year students (except CSE) studying in engineering institutions and universities of the country. It serves as both text book and / or useful reference work. It contains 5 units which include calculus, matrices, sequences & series and multivariable calculus along with their applications. This renowned and well respected title provides in one handy volume with the essential mathematical tools that helps in understanding the subject and problem solving techniques with many real life engineering applications. As per trademark of AICTE, this book is in student friendly style, author has endeavored enormous efforts in providing numerous solved examples and exercise under each topic to facilitate better understanding of the concepts to the students. Majority of Questions in this book have been designed to success the reader understands of the subject. Professionals or those who are preparing for competitive examinations will also find this book very useful. This book will give the students a complete grasp of the mathematical skills that are needed by engineers all over the country. Some Salient Features of the Book: · In depth coverage of all related, essential and mentioned topics as per AICTE in simple presentation with clarity and accuracy. · Emphasis on the applications of concepts and theorems. · Core concepts are presented through a large number of solved graded model examples in an innovative and lucid manner. A good number of relatively competitive problems are given at the end of each unit in the form of short questions, HOTS, assignments, MCQs and know more for student's practices purpose. Practical /Projects/ Activity also given in each unit for enhancing the student's capability, to increase the feeling of team work. To clarify the subject, the text has been supplemented through Notes, Observations and Remarks; an attempt has been made to explain the topic through maximum use of geometries wherever possible. · Some standard problems with sufficient hints have been included in each exercise to gauge the



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**Chapter 3:** Sequences and Series.

Chapter 4: Multivariable Calculus -I.

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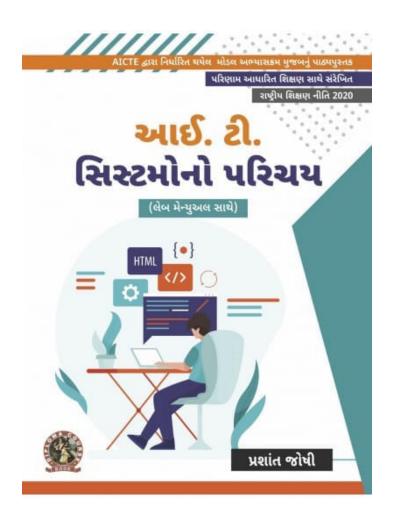
### **Author**

### Reena Garg

Dr. Reena Garg, M.Sc. Mathematics (Gold Medalist), M.Phil, Ph.D is Assistant Professor (Mathematics) in YMCA University of Science & Technology, Faridabad (Haryana). She also taught in C.I.T.M. Faridabad (presently known as Manav Rachna International University, Faridabad). Her teaching experience of more than a decade has made this book more valuable for the knowledge seekers. She has published more than 10 research papers in various International Journals. She is a life-time member of Forum of Inter-disciplinary mathematics in India. She is a member of reviewer Board in IJRET, Bangalore.



### K H A N N A B O O K S . C O M



# Introduction to IT Systems (with Lab Manual)

**Author:** Prashant Joshi

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**Language :** Gujarati

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Ebooks, Gujarati Books

**SKU:** 1725694946

**Condition Type:** New



### **Product Description**

"INTRODUCTION TO SYSTEMS" is a compulsory paper for the first year Diploma in Engineering & Technology. Syllabus of this book is strictly aligned as per model curriculum of AICTE, and academic content is amalgamated with the concept of outcome based education. Book covers five units- Internet Skills and Computer Basics, Operating Systems, HTML and CSS, open Office Tools. And information Security Best Practices. Each topic in units is written in each and lucid manner. Every unit contains a set of exercise at the end of each unit to test student's comprehension. Some salient features of the book: 1. Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and unit Outcomes. 2. Practical are included with each unit for better understanding of the theoretical concepts. 3. Book Provides interesting facts and various activities pertaining to topic. QR Codes are used for additional E-resources, use of ICT, online code editors, online quiz etc. 4. Student and teacher centric subject materials included in balanced and chronological manner. 5. Figures, tables, source code for web programming, numerous examples and applications are included to improve clarity of the topics. 6. Objective questions, subjective questions and crossword exercise are given for practice of students after every chapter.



# Table of Contents Foreword, Acknowledgement, Preface, Outcome Based Educations, Course Outcomes, List of Abbreviations List of Figures, Guidelines for Teachers, Guidelines for Students UNIT 1: Internet skills and computer Basics. UNIT 2: Operating Systems. UNIT 3: HTML AND CSS. UNIT 4: Open Office Tools. UNIT 5: Information Security Best Practices.

### Author

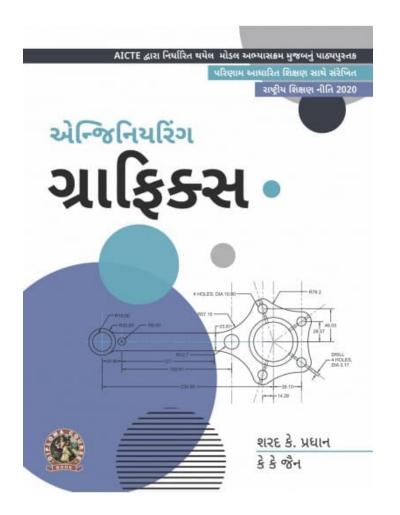
**Annexure** 

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**Prashant Joshi** 





### **Engineering Graphics**

**Author:** K. K. Jain

**ISBN 13:** 978-93-55380-27-2

**ISBN 10:** 93-55380-27-5

**E-ISBN 13:** 978-93-55380-27-2

**Edition:** First

**Pages:** 276

**Type of book :** Paperback

**Weight (g):** 400.00

**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725646667

**Condition Type:** New



### **Product Description**

" Engineering Graphics" is a compulsory paper for the first year Diploma course in Engineering & Technology. Syllabus of this book is strictly aligned as per model curriculum of AICTE, and academic content is amalgamated with the concept of outcome based education. Book covers six topics- Basic Elements of drawing, Orthographic Projections, Isometric Projections, Free Hand Sketcher of Engineering Elements, Computer Aided Drafting Interface, Computer Aided Drafting. Each topic is written in easy and lucid manner. Every chapter contains a set of exercise at the end of each unit to test the student's comprehension. Some salient features of the book: 1. Content of the book is aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes. 2. In start of each unit learning outcomes are listed to make the student understand what is expected out of him/ her after completing that unit. 3. Book provides lots of recent information, interesting facts, Codes for E-resources, QR Code for use of ICT, projects, group discussion etc. 4. Student and teacher centric subject materials included in book with balanced and chronological manner. 5. Figures, tables and software screen shots are inserted to improve clarity of the topics. 6. Apart from essential information a 'Know More' section is also provided in each unit to extend the learning beyond syllabus. 7. Short questions, objective questions and long answer exercises are given for practice of students after every chapter. 8. Solved and unsolved problems including numerical examples are solved with systematic steps.



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List of Figures,

List of tables Guidelines for Teachers,

**Guidelines for Students** 

**UNIT 1:** Basic Elements of Drawing.

**UNIT 2:** Orthographic Projections.

**UNIT 3:** Isometric Projections.

**UNIT 4:** Free Hand Sketches of Engineering Elements.

**UNIT 5:** Computer Aided Drafting Interface.

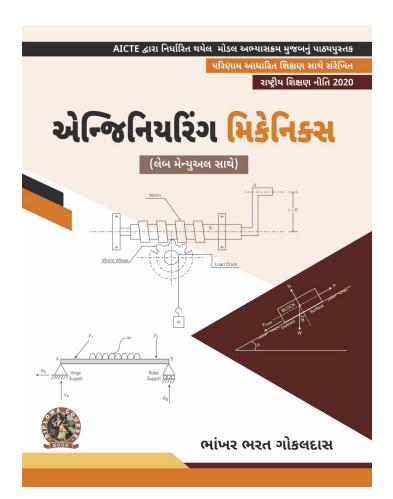
**UNIT 6:** Computer Aided Drafting.

### **Authors**

Sharad K. Pradhan

K. K. Jain





# **Engineering Mechanics (with Lab Manual)**

**Author:** B. B. Gokaldas

**ISBN 13:** 978-93-55380-75-3

**ISBN 10:** 93-55380-75-5

**E-ISBN 13:** 978-93-55380-75-3

**Edition:** First

**Pages:** 192

**Type of book :** Paperback

Weight (g): 310.00

**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725764060

**Condition Type:** New



### **Product Description**

"Engineering Mechanics with Lab Manual" is a compulsory for the first year Diploma course in Engineering 7 Technology. Syllabus of this book is strictly align as per model curriculum of AICTE and academic content is amalgamate with the concept of Outcome based Education (OBE). Book covers is five units- Basic mechanics & force system, Equilibrium, Friction, Centroid and Centre of gravity & simple lifting machine. Each unit written in every easy, systematic and orderly manner. Each unit contains a set of exercise at the end of each unit to test the student's comprehension. Also in each unit the laboratory practical pertaining to unit is included. Some salient features of the book: 1. Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes. 2. Book provides lots of recent information, interesting facts, QR Code for E-resources, QR Code for use of ICT, projects, group discussion etc. 3. Student and teacher centric subject materials included in book with balanced and chronological manner. 4. Figures, tables, equations and activities are insert to improve clarity of the topics. 5. Objective questions, Short questions and long answer exercise given for practice of students after every unit. 6. Solved and unsolved problems including numerical examples taken with systematic steps.



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**Chapter 1:** Basic of Mechanics and Force System.

**Chapter 2:**Equilibrium.

**Chapter 3:** Friction.

**Chapter 4:** Centroid and Centre of Gravity.

Chapter 5: Centroid and Centre of Gravity.

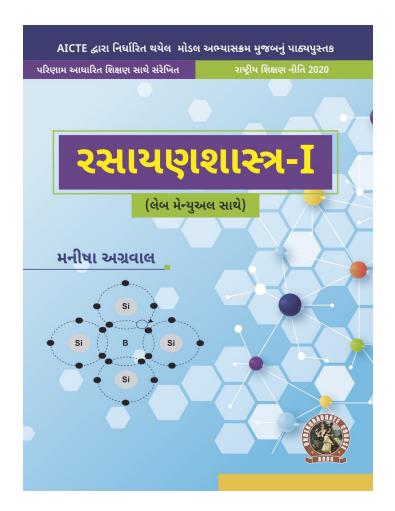
**Appendix** 

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#### **Author**

BHANKHAR BHARAT GOKALDAS





## **Chemistry-I (with Lab Manual)**

**Author:** Manisha Agrawal

**ISBN 13:** 978-93-55381-52-1

**ISBN 10:** 93-55381-52-2

**E-ISBN 13:** 978-93-55381-52-1

**Edition:** First

**Pages:** 212

**Type of book :** Paperback

Weight (g): 300.00

**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725585013

**Condition Type:** New



## **Product Description**

"Chemistry-I" is a compulsory paper for the first year Undergraduate course in Engineering & Technology. Syllabus of this book is strictly aligned as per model curriculum of AICTE, and academic content is amalgamated with the concept of outcome based education. Book covers seven topics- Atomic and molecular structure, Spectroscopic Technique and applications, Inter-molecular Forces and Potential Energy Surfaces, Use of Free Energy in Chemical Equilibrium, Periodic Properties, Stereo-chemistry, Organic Reactions and Synthesis of Drug Molecules. Each topic is written is easy and lucid manner. Every chapter contains a set of exercise at the end of each unit to test student's comprehension. Salient Features: 1. Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes. 2. Book Provides lots of recent information, interesting facts, QR Code for E-resources, QR Code for us of ICT, Projects group discussion etc. 3. Students and teacher centric subject materials included in book with balanced and chronological manner. 4. Figures, tables, chemical equations and comparative charts are inserted to improve clarity of the topics. 5. Short questions, objective questions and long answer exercises are given for practice of students after every chapter. 6. Solved and unsolved problems including numerical examples are solved with systematic steps.



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**Chapter 1:** Atomic and Molecular Structure.

**Chapter 2:** Spectroscopic Techniques and Applications.

**Chapter 3:** Intermolecular Forces and Potential Energy Surfaces.

Chapter 4: Use of Free Energy in Chemical Equilibria.

**Chapter 5:** Periodic Properties.

Chapter 6: Stereochemistry and Organic Reactions.

**Chapter 7:** Organic Reactions Synthesis of Drug Molecules.

**Chapter 8:** Annexure.

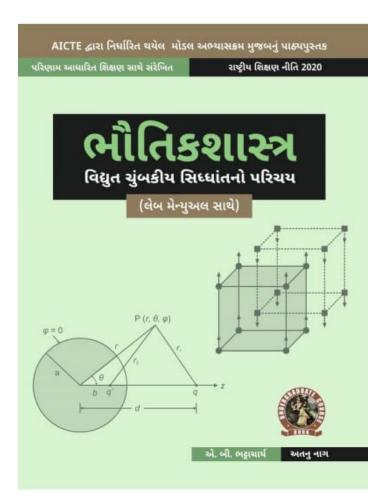
**Appendices** 



#### **Author**

Manish Agrawal Dr. Manisha Agarwal is Dean, Basic Sciences at Chhattisgarh Swami Vivekanand Technical University Bhilai. Professor and head, Department of Chemistry at Rungta College of Engineering & Technology, Bhilai, (C.G.). She completed Ph. D. from Pt. Ravishankar Shukla University, Raipur in 1999. Since then she has been engaged in teaching and research. Dr. Manisha has authored several papers which have been published in SCI indexed International and National journals. She has organised more than 10 Conferences and workshops as convener among them four were International Conferences. She has credited five books as author, three patents as inventor and applicant and six Research Project Grants as Principal Investigator from Government Funding agencies like AICTE, CCOST and CSVTU. She has supervised 5 M. Phil. Students, 12 BE and Diploma students. Presently 6 research scholars are perusing Ph. D. under her supervision.





# Physics (Introduction to Electromagnetic Theory) (with Lab Manual)

**Author:** A. B. Bhattacharya

**ISBN 13:** 978-93-55381-61-3

**ISBN 10:** 93-55381-61-1

**E-ISBN 13:** 978-93-55381-61-3

**Edition :** First

**Pages:** 328

**Type of book :** Paperback

Weight (g): 430.00

**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725593502

**Condition Type:** New



## **Product Description**

Engineering Physics: Introduction to Electromagnetic Theory has been written for the first year students of B. Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student's needs Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Electromagnetic Theory to tackle 21st century and onward engineering challenges and address the related questions. Some Salient Features of the Book: 1. Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject. 2. To develop knowledge on critical questions, solved and supplementary problems covering all types of medium and advanced level problems in a very logical and systematic manner. 3. Some essential information for the users under the heading "know More" for clarifying some basic 4. Information as well as comprehensive synopsis of formulae for a quick revision of the basic principles. 5. Constructive manner of presentation so that an Engineering degree students can prepare to work in different sector or in national laboratories at the very forefront of technology.

#### **Table of Contents**

Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teacher Guidelines for Students Unit 1: Electrostatics in Vacuum. Unit 2: Electrostatics in Linear Dielectric Medium. Unit 3: Magnetostatics. Unit 4: Magnetostatics in Linear Dielectric Medium. Unit 5: Faraday's Law. Unit 6: Maxwell's Equations. Unit 7: Electromagnetic Waves. Table of Physical Constants Appendices Annexures References for Further learning CO and PO attainment Table Index



#### **Authors**

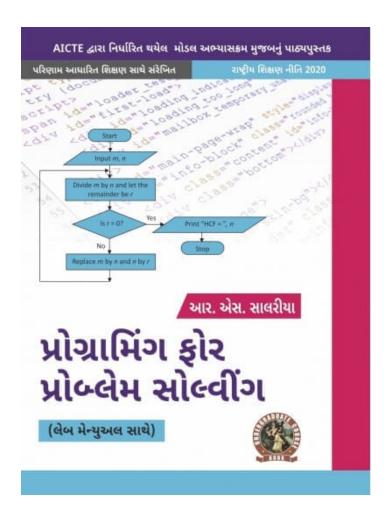
#### A. B. Bhattacharya

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers.

#### A. Nag

Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.





## **Programming for Problem Solving (with Lab Manual)**

**Author:** R.S. Salaria

**ISBN 13:** 978-93-55381-53-8

**ISBN 10:** 93-55381-53-0

**E-ISBN 13:** 978-93-55381-53-8

**Edition:** First

**Pages:** 344

**Type of book :** Paperback

Weight (g): 700.00

**Year:** 2023

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725651394

**Condition Type:** New



## **Product Description**

This textbook is designed as per the model curriculum of AICTE for the first year students of all branches of undergraduate programme in Engineering & Technology (BE/BTech). The subject of programming for problem Solving aims at developing problem solving skills among the students and the skills to create programs in C language for their implementation. This book emphasizes to empower the students to grasp the skills required for problem solving and to develop deep understanding of the constructs of C language. These aspects of the subject are well illustrated through enormous solved programming problems. Salient Features: 1. Simple and lucid language that enables students to grasp the subject. 2. Demonstrates the elegant programming style. 3. 165+ ready to run programs for reference and to illustrate the program development process. 4. 135+ Short answer type questions to provide an opportunity for self-assessment of the fundamental concepts learned by answering them precisely. 5. 165+ multiple choice questions to provide an opportunity to synthesize the fundamental concepts. 6. 90+ Programming problems to provide an opportunity to harness programming skills.



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**Guidelines for Students** 

**Chapter 1:** Introduction to Programming.

**Chapter 2:** Arithmetic Expressions and Precedence.

Chapter 3: Conditional Branching and Loops.

Chapter 4: Arrays.

**Chapter 5:** Basic Algorithms.

**Chapter 6:** Functions.

**Chapter 7:** Recursion.

**Chapter 8:** Structures.

Chapter 9: Pointers.

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References for further learning

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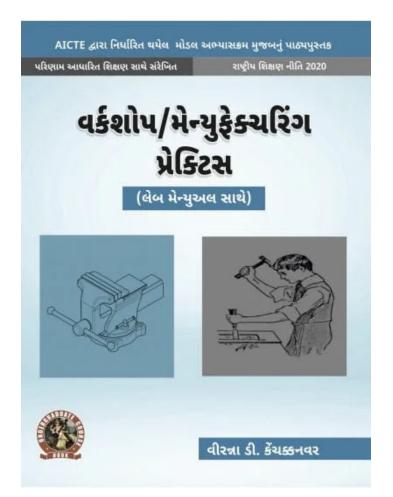


#### **Author**

#### R. S. SALARIA

Prof. R.S. Salaria is a superior teacher, a prolific author and a great motivator. He is an alumnus of IIT, Delhi. He is a Certified Software Quality professional by Ministry of Information Technology, Govt. of India: Sun Certified Programmer as well as Sun Certified Trainer by SUN Microsystems. He is a life member of computer society of India, Mumbai: Institution of Electronics and Telecommunication Engineers, New Delhi: Indian Society for Technical Education, New Delhi: Punjab Academy of Sciences, Patiala. Presently, he is talking initiatives to Sensitize the citizens of this great country about their fundamental responsibilities towards society and seeking their contributions to make the society a wonderful place for happy and peaceful living.





## Workshop / Manufacturing Practices (with Lab Manual)

**Author:** Veerana D.K.

**ISBN 13:** 978-93-55381-60-6

**ISBN 10:** 93-55381-60-3

**E-ISBN 13:** 978-93-55381-60-6

**Edition:** First

**Pages:** 176

**Type of book :** Paperback

Weight (g): 290.00

**Year:** 2023

**Language:** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**SKU:** 1725639338

**Condition Type:** New

#### **Product Description**

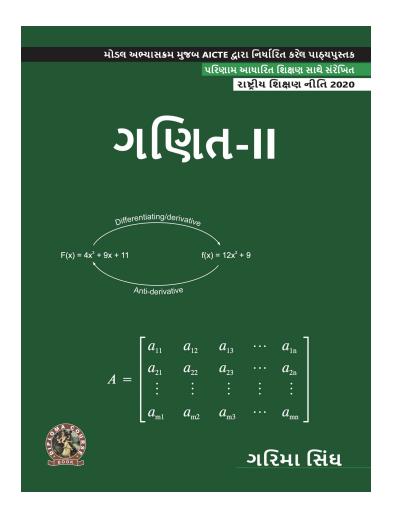
The textbook on "Workshop/ Manufacturing Practices" is designed to cater the needs of young minds of 21 century. The AICTE model curriculum and National Education Policy has driven a new wave in the technical education. The textbook is designed not only to cater the need of the syllabus but also to look things in a different perspective. The Workshop is the place where the core of learning about different materials, equipment, tools and techniques takes place. Basically the workshop used to prepare the small components by hand tools. Sometimes they may be parts of the large machines or may may be parts for replacement/repairs. In this text book an attempt has been made to connect the conventional tools usage to advanced machine tools usage. The relevant practical examples are quoted to make the readers more comfortable with product and processes. The blooms taxonomy is fallowed in construction of each chapters and exercises. The objective and multiple questions with higher order thinking may help the readers to not only to face the semester end exam even they may help in competitive and other examinations. Salient Features: 1. Manufacturing Methods. 2. CNC Machining, Additive manufacturing. 3. Fitting operations & power tools. 4. Electrical & Electronic. 5. Carpentry. 6. Plastic mounding, glass cutting. 7. Metal casting. 8. Welding (arc welding & gas welding), brazing. 9. Laboratory experiments and models. 10. Appendices. 11. References.



## **Table of Contents Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures List of Tables Guidelines for Teacher Guidelines for Students Part- A: Manufacturing Practices** Chapter 1: Manufacturing Methods. Chapter 2: CNC Machining, Additive manufacturing, Fitting operations & power tools. Chapter 3: Electrical & Electronic. Chapter 4: Carpentry, Plastic molding, glass cutting. Chapter 5: Metal casting, welding (arc welding & gas welding), brazing. **Part- B: Workshop Practice Laboratory Appendices** References **Author**



Veerana D.K.



### **Mathematics - II**

**Author:** Garima Singh

**ISBN 13:** 978-93-55380-43-2

**ISBN 10:** 93-55380-43-7

**E-ISBN 13:** 978-93-55380-43-2

**Edition:** First

**Pages:** 156

**Type of book :** Paperback

Weight (g): 230.00

**Year:** 2025

**Language:** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**Condition Type:** New



#### **Product Description**

"Mathematics-II" is a Compulsory paper for the first year students of Diploma engineering courses (common to all branches). Syllabus of this book is strictly aligned to the model curriculum of AICTE. And academic content is amalgamated with the concept of outcome based education. Apart from diploma it is useful for all students who are interested in basic /elementary mathematics and competitive examinations. Book covers seven topics-Determinants, Matrices, Integral Calculus and it's applications. Co-ordinate Geometry and it's applications, vectors and it's applications, Differential equations. Basic of MATLAB. Each topic is written in an easy and lucid manner with a holistic view. There has been deliberated attempt to keep the number of pages in the book minimum without compromising with the matter. Every chapter contains a set of exercises at the end of each unit to test the student's comprehension. Some salient features of the book: 1. For direct recapitulation of main concepts, formulae and results a brief summary of each unit has been given. 2. Objective questions and subjective questions are given for practice of students after every unit. 3. Content of the book is aligned with the mapping of Course Outcomes, Programs Outcomes and uni Outcomes. 4. Apart from the theory explanation and solved examples book provides for mini projects, activities, fun facts, QR codes, case studies, video resources etc.5. The text has been supplemented with notes, remarks, remember sections within grey boxes. 6. Student and teacher centric subject materials are included in the book in a balanced manner. 7. Real life applications are inserted to improve clarity of this topics. 8. Know more section has been introduced which constitutes of additional information related to the topic.9. Check-out section has been introduced so as to active the curiosity part of the student by correlating all the topics studied in this book with MATLAB. 10. At the end of each unit. An excerpt related to eminent Indian Mathematicians is given so as to make . 11. Student have a glimpse of the

#### **Table of Contents**

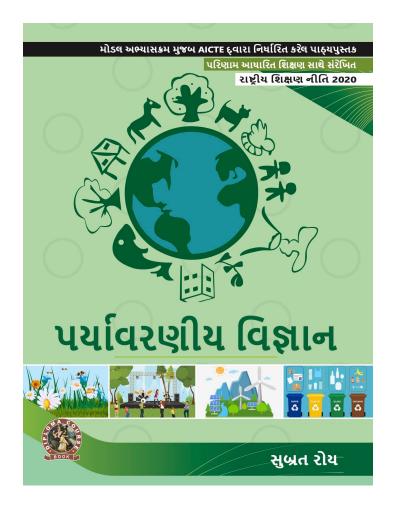
Foreword, Acknowledgement, Preface, Outcome Based Educations, Course Outcomes, Abbreviations and Symbols, List of Figures, Guidelines for Teachers, Guidelines for Students Chapter 1:

Determinants and Matrices. **Chapter 2:** Integral Calculus. **Chapter 3:** Co-ordinate Geometry. **Chapter 4:** Vector Algebra. **Chapter 5:**Differential Equations. **Chapter 6:** Appendices & Annexures.

#### **Author**

**Garima Singh** 





### **Environmental Science**

**Author:** Subrat Roy

**ISBN 13:** 978-93-55380-83-8

**ISBN 10:** 93-55380-83-6

**E-ISBN 13:** 978-93-55380-83-8

**Edition:** First

**Pages:** 120

**Type of book :** Paperback

Weight (g): 200.00

**Year:** 2025

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**Condition Type:** New

**Country Origin:** India

## **Product Description**

"Environmental Science" is an audit course for the first year Diploma programme in Engineering & Technology. Syllabus of this book is strictly aligned as per model curriculum of AICTE, and academic content is amalgamated with the concept of outcome- based education. Book covers four units- Ecosystem, Air and Noise Pollution, Renewable Sources of Energy and Solid waste management, ISO 14000 & Environmental Management, Every unit contains as set of exercise at the end of each unit to test the student's comprehension. Some salient features of the book: 1. Content of the book aligned with the mapping of Course Outcomes, Programs Outcomes and Unit Outcomes. 2. Book provides lots of recent information, interesting facts, QR Code for E-resources, QR Code for use of ICT, projects, group discussion etc. 3. Student and teacher centric subject materials included in book with balanced and chronological manner. 4. Figures and tables are insert to improve clarity of the topics. 5. Objective questions, Short questions and long answer exercise given for practice of students after every unit.



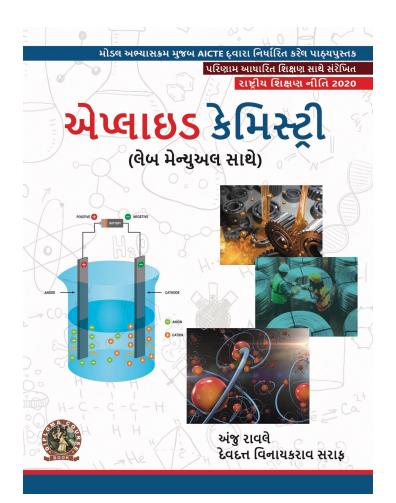
#### **Table of Contents**

Foreword, Acknowledgement, Preface, Outcome Based Educations, Course Outcomes, Abbreviations and symbols, List of Figures, Guidelines for Teachers, Guidelines for Students, Unit 1: Ecosystem. Unit 2: Air and Noise pollution. Unit 3: Renewable sources of Energy. Unit 4: Soil waste Management, ISO 14000& Environmental management. Important Day Related to Environment CO and Po Attainment Table Index.

**Author** 

**Subrat Roy** 





## **Applied Chemistry (with Lab Manual)**

**Author:** Anju Rawlley

**ISBN 13:** 978-93-55380-19-7

**ISBN 10:** 93-55380-19-4

**E-ISBN 13:** 978-93-55380-19-7

**Edition:** First

**Pages:** 236

**Type of book :** Paperback

Weight (g): 350.00

**Year:** 2025

**Language :** Gujarati

**Publisher:** Khanna Publishing House

**Categories:**AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

**Condition Type:** New



#### **Product Description**

This text book o "Applied Chemistry" is development as per AICTE model curriculum ,2018, for compulsory course on Applied Chemistry of first years Diploma Program in Engineering and Technology. Atomic Structure, Chemical Bonding & Solution, Water, Engineering Materials, Chemistry of fuels & Lubricants and Electrochemistry are the five units of this book, comprising of both practical and theory. Some salient features of the book: 1. Course Outcomes and Unit Outcomes are written specifically and are mapped with programme Outcomes. 2. Utmost care have been taken to amalgamate the philosophy of outcome based education. 3. The structure of the textbook is comprehensive, where in practical exercises are integral part of each unit. 4. The text is presented in a very simple way with illustrations, examples, tables, flow chart, self -assessment questions and their solutions. 5. Micro projects, points/issue for the creative inquisitiveness & curiosity, know more, video links, case study and summary points are integral part of each unit to facilitate the students to develop the attitude of scientific inquiry, investigate the cause and effect relationship, systematic, scientific & logical thinking, ability to observe, analyse and interpret. 6. To meet the requirement of outcome based education (OBE) and outcome based assessment (OBA), criterion referenced testing (CRT) have been used as an integral part of assessment in each practical. 7. Sample QR codes have been provided in each units on some topics/sub topics for supplementary reading and reinforcing the learning.

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#### **Authors**

**Anju Rawlley** 

**Devdatta Vinayakrao Saraf** 

