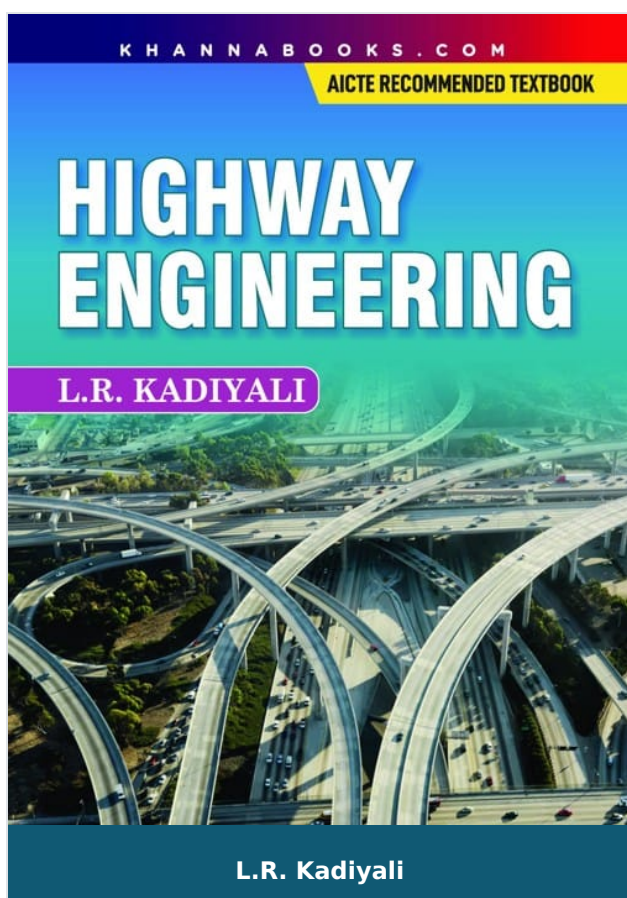




Highway Engineering

Author :	L.R. Kadiyali
ISBN 13 :	978-93-86173-13-3
ISBN 10 :	9386173131
E-ISBN 13 :	978-93-86173-13-3
Edition :	First
Pages :	604
Type of book :	Physical
Year :	2025
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 525.00
Categories :	Civil Engineering, UNIVERSITY RECOMMENDED, Civil Engineering, Book Store
Condition Type :	New
Country Origin :	India

Product Description

This book on Highway Engineering shall be useful for B.E./B. Tech & M.E/ M. Tech students of Civil Engineering. It shall also be useful for practicing Engineering and designers.

Table Of Contents

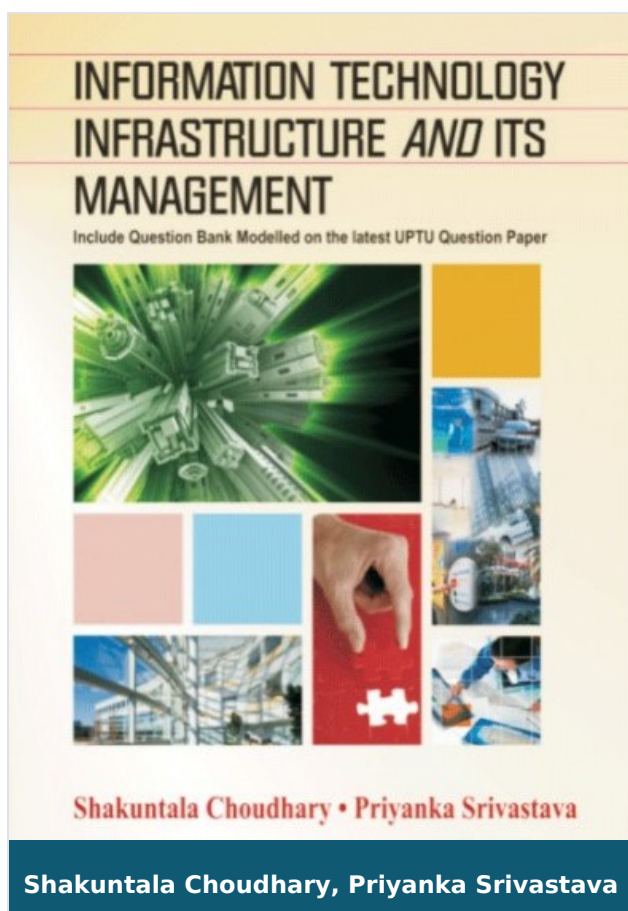
- Development of Highways
- Highway Administration and Finance
- Road User and the Vehicle
- Geometric Design
- Design Surveys, Soils and Aggregates, Investigations and Tests
- Design, Drawing, Estimates and Projects Report
- Economic Evaluation of Highway Projects
- Embankment Design and Construction
- Types of Pavements and Factors Governing Pavement Design
- Pavement Materials
- Design of Flexible Pavements
- Rigid Pavements
- Soil Stabilisation
- Granular Sub-Bases, Bases and Surface Courses
- Brick, Stone and Cement Concrete Block Pavements
- Hill Roads
- Rural Roads (Low Volume Roads)
- Urban Roads
- Expressways
- Toll Roads
- Desert Roads
- Roads in Swampy and Water-Logged Areas and in Black Cotton Soils
- Road Construction Machinery

- Road Construction Programming and Management
- Highway Drainage
- Cross-Drainage Structures
- Road Accident and Highway Design
- Road Signs
- Road Markings
- Traffic Signals
- Highway Safety Appurtenances
- Highway Maintenance
- Pavement Evaluation
- Overlay Design and construction
- Use of Geosynthetics
- Environmental, Landscaping and Arboriculture
- Airport Engineering

Author

L.R. Kadiyali

L.R. Kadiyali Dr. L.R.Kadiyali is B.E.(Hons.), from Bombay and pursued Ph.D. from Kakatiya University.He has done P.G. diploma in Highway and Traffic Engineering from Newcastle-Upon-Tyne. He is Formerly Chief Engineer, (Roads Wing), Ministry of Road Transport & Highways, New Delhi and Study Director, Road User Cost Study, Central Road Research Institute New Delhi.



Information Technology Infrastructure & Its Management

Author : Shakuntala Choudhary, Priyanka Srivastava

ISBN 13 : 978-93-80016-39-9

ISBN 10 : 9380016395

E-ISBN 13 : 978-93-80016-39-9

Edition : 1

Pages : 264

Type of book : Physical

Year : 2014

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 195.00

Categories : [Computer Science Engineering,](#)
[Book Store](#)

Condition Type : New

Country Origin : India

Product Description

This book is specially designed to serve as a textbook for undergraduate students of engineering at Uttar Pradesh Technical University (UPTU), This subject has been introduced for the first time in UP technical University. We have tried our best to cover the whole syllabus. Throughout the text, it has been our Endeavour to keep the explanations and definitions as lucid as possible. This book is written exclusively with students in mind. The language is user-friendly and conducive to learning. Though every attempt has been made to avoid and check error, we will be grateful to readers if they can point out any that may have crept in inadvertently.

Table Of Contents

- Introduction to IT Infrastructure
- Service Delivery Process
- Service Support and Storage Management
- Security Management
- IT Ethics and Emerging Trends
- Question Bank

Author

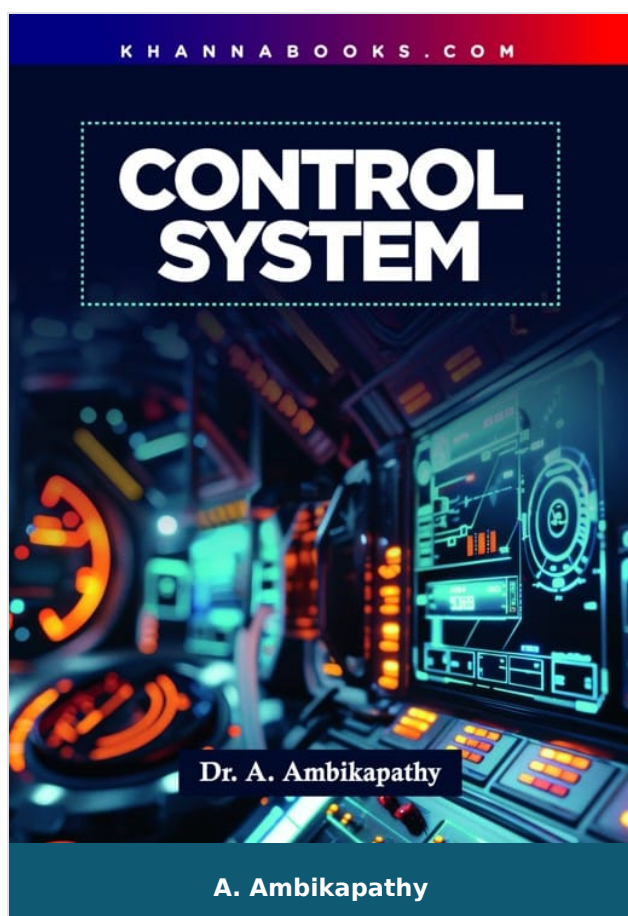
Shakuntala Choudhary

Shakuntala Choudhary has completed his Bachelor of Engineering & M. Tech. in Computer Science & Engg. She started her teaching career in an Engineering Education from Sri Balaji College of Engineering and Technology, Jaipur, India. And worked their as HOD of IT Department. She also served in Dronacharya College of Engineering Gurgaon. Presently she is working in Bansal Institute of Engineering & Technology, Lucknow. She has rich experience in teaching for various subject like Automata, Analysis of Algorithms, Discrete Mathematics and IT Infrastructure. She had certified by ""Faculty Enable Programme"" (FEP) at INFOSYS, Chandigarh. She has published 3 - Vol of a technical magazine ""EPISTLE"" She has published various National level technical papers and Attended various Conferences. "

Priyanka Srivastava

Priyanka Srivastava has completed his B.Tech in Information Technology & MBA (IT) from ICFAI University. She started her teaching career in engineering education from Dr. M.C. Saxena College of Engineering & Technology, Lucknow. Presently she is working as a Faculty in Bansal Institute of Engineering & Technology, Lucknow. She attended various

national level Seminars and Workshops. She has experience in teaching for various subjects like C-Programming, Web Technology, Database Management and IT Infrastructure Management.



Control System

Author :	A. Ambikapathy
ISBN 13 :	978-93-80016-94-8
ISBN 10 :	9380016948
E-ISBN 13 :	978-93-80016-94-8
Edition :	First
Pages :	788
Type of book :	Physical
Year :	2025
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 785.00
Categories :	Electrical, Electronics & Communication Engineering, Book Store
Condition Type :	New
Country Origin :	India

Product Description

The textbook on Control System tells about the basic concepts of control system in a detailed manner. This book contains the brief explanation about block diagram reduction, signal flow graph and time domain analysis. The techniques which are used in control system such as root locus, bode plot and polar plots are explained in detail. designing procedures for the compensators (Lag, lead and lag lead) are given in easy manner and steady state space analysis also explained in a simple manner. The effort has been taken to explain all the concepts in a simple language to make the students to understand the concepts very easily.

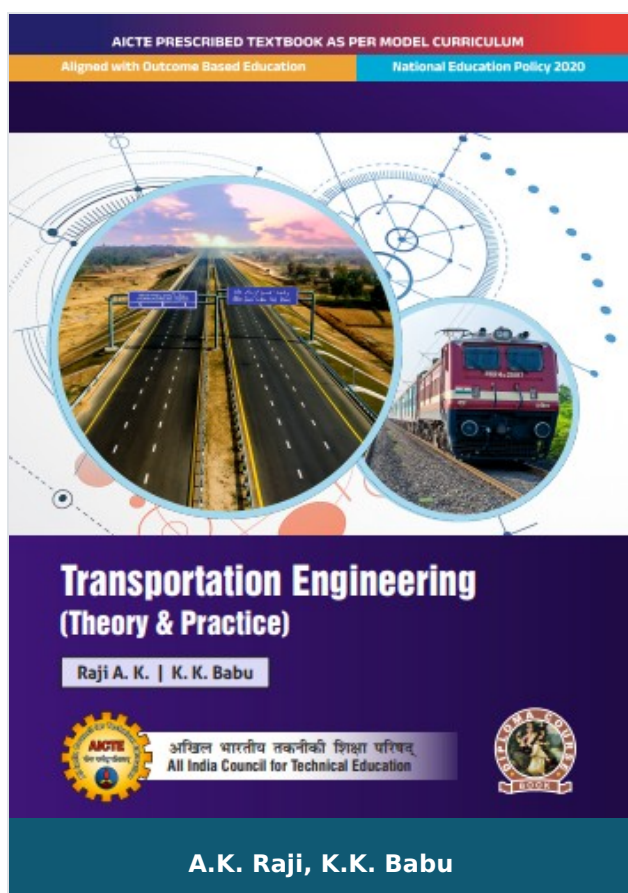
Table Of Contents

- Basics of Control System
- Time Domain Analysis
- Concept of Stability
- Correlation
- Compensators Design

Author

A. Ambikapathy

A. Ambikapathy currently working as an assistant professor in " Galgotia Colege of Engineering and Technology " holds M. Tech degree. She has presented five papers in national level conferences. She worked under three different universities and having ten years of teaching experience.



Transportation Engineering (Theory & Practice)

Author : A.K. Raji, K.K. Babu

ISBN 13 : 978-93-55386-77-9

ISBN 10 : 935538677X

E-ISBN 13 : 978-93-55386-77-9

Edition : First

Pages : 308

Type of book : Physical

Year : 2026

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 548.00

Categories : [AICTE Prescribed Textbooks,](#)
[English Books, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

Transportation Engineering (Theory & Practice)

This book gives a comprehensive coverage of Highway Engineering and Railway Engineering, and is primarily intended for the second-year Diploma course under the AICTE curriculum. The contents are designed and presented in simple language and lucid style in line with the principles of implementation of outcome-based education, as per the National Education Policy (NEP) 2020.

Salient features:

- Content of the book aligned with the mapping course outcomes, programs and Units Outcomes.
- In the beginning of each unit learning outcomes are listed to make the student understand what is expected out of him/her after completing that unit.
- Book provides lots of recent information, interesting facts, QR code for E-resources, QR code for use of ICT, projects, group discussion etc.
- Student and teacher centric subject materials included in book with balanced and chronological manner.
- Figures, tables, and software screen shots are inserted to improve clarity of the topics.
- Apart from essential information a 'know more' section is also provided in each unit to extend the learning beyond syllabus.
- Short questions, objective questions and long answer exercises are given for practice of students after every chapter.
- Solved and unsolved problems including numerical examples are solved with systematic steps.

Table Of Contents

- Foreword
- Acknowledgement
- Preface
- Outcome Based Education
- Course Outcomes
- Guidelines for Teachers
- Guidelines for Students
- Abbreviations and Symbols
- List of Figures
- List of Figures
- OVERVIEW OF HIGHWAY ENGINEERING
- GEOMETRIC DESIGN OF HIGHWAYS
- CONSTRUCTION OF ROAD PAVEMENTS
- BASICS OF RAILWAY ENGINEERING
- TRACK GEOMETRICS, CONSTRUCTION AND MAINTENANCE
- APPENDICES
- ANNEXURES
- References for Further Learning
- CO and PO Attainment Table
- Index

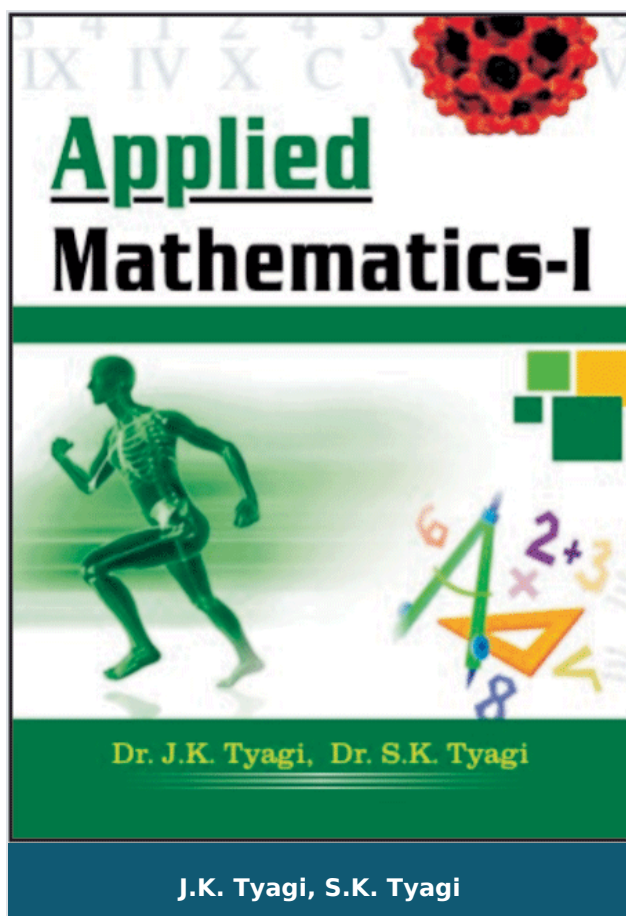
Author

A.K. Raji

Dr. Raji A. K Professor & Head (Retd.), Dept. of Civil Engineering, NSS College of Engineering, Palakkad - 678 008, Kerala Dr. K. K. Babu Professor (Retd.), Dept. of Civil Engineering, NSS College of Engineering, Palakkad - 678 008, & Former Director, Sreepathy Institute of Management and Technology, Palakkad, Kerala

K.K. Babu

Dr. Raji A. K Professor & Head (Retd.), Dept. of Civil Engineering, NSS College of Engineering, Palakkad - 678 008, Kerala Dr. K. K. Babu Professor (Retd.), Dept. of Civil Engineering, NSS College of Engineering, Palakkad - 678 008, & Former Director, Sreepathy Institute of Management and Technology, Palakkad, Kerala



Applied Mathematics-I

Author : J.K. Tyagi, S.K. Tyagi

ISBN 13 : 978-93-80016-17-7

ISBN 10 : 9380016174

E-ISBN 13 : 978-93-80016-17-7

Edition : 1

Pages : 485

Type of book : Physical

Year : 2012

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 310.00

Categories : [APPLIED SCIENCES & HUMANITIES, Book Store,](#)
[APPLIED SCIENCES & HUMANITIES](#)

Condition Type : New

Country Origin : India

Product Description

The language is very simple and easily understandable. The approach is to communicate the practical aspects of mathematics in a way that drives out the common fear of learning any mathematical subject. A large number of solved and unsolved problems have been included. Topics are followed by figures and tables. The notations and terminology have been clearly explained wherever desirable. In each chapter, all concepts and definitions have been discussed in detail with suitable examples.

Table Of Contents

- Differential Calculus
- Integral Calculus
- Ordinary Differential Equations
- Vector Calculus
- Tutorials Sheets

Author

J.K. Tyagi

Dr. J.K. Tyagi is Professor and head department of Applied Science, Maharaja Agarsain Institute of Technology Ghaziabad (U.P.)

S.K. Tyagi

Dr. S.K. Tyagi is Senior Lecturer, Amity School of Engineering and Technology , Amity University, Noida (U.P.)

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

INTRODUCTION TO RASPBERRY PI AND ARDUINO



K.S. Kamatchi

Kamatchi K. S.

Introduction to Raspberry Pi and Arduino

Author : Kamatchi K. S.

ISBN 13 : 978-93-55382-24-5

ISBN 10 : 9355382243

E-ISBN 13 : 978-93-55382-24-5

Edition : First

Pages : 192

Type of book : Physical

Year : 2026

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 298.00

Categories : [Computer Science Engineering,](#)
[New Arrivals, Book Store,](#)
[Sathyabama Series](#)

Condition Type : New

Country Origin : India

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

"Introduction to Raspberry Pi and Arduino" is a comprehensive, practical guide designed to launch aspiring engineers, students, and hobbyists into the dynamic world of the Internet of Things (IoT), embedded systems, and electronics. Recognizing that modern IoT innovation rests upon versatile prototyping tools, this book provides focused, hands-on instruction for the two most popular platforms: Arduino and Raspberry Pi.

The core purpose of this text is to bridge the gap between theoretical electronic concepts and the tangible creation of smart devices. The journey begins by laying the groundwork, introducing the essential components of any IoT ecosystem, such as sensors and actuators. The book then systematically separates the platforms: Arduino is utilized for building interactive and rapid-prototyping applications, while the more powerful Raspberry Pi is leveraged for creating complex, networked, and web-connected projects. Readers will learn to integrate Wi-Fi supported modules like the ESP 8266, manage cloud communication (e.g., Thing Speak, Blynk), and design full-scale home automation systems that combine both microcontrollers.

With its academic yet friendly tone and chapters structured around hands-on examples, this resource guarantees that by the end, you will be equipped with the necessary knowledge and practical skills to create your own innovative IoT solutions, moving from the simplest to the most sophisticated systems. This book is your essential gateway to becoming a builder in the digital age.

Salient Features:

- **Dual Platform Focus:** Dedicated, practical coverage of both Arduino (for interactive prototyping) and Raspberry Pi (for complex, networked systems), providing versatile skills for any DIY electronics project.

- **Core IoT Components:** Detailed introduction to sensors and actuators and their roles in IoT systems, with practical guidance on interfacing various types of sensors (LDRs, DHT-22, etc.) for crucial data collection.
- **Hands-on Projects:** Every chapter provides hands-on examples and step-by-step guides, enabling readers to follow along, experiment, and immediately build their own IoT applications for real-world problem-solving.
- **Cloud Communication:** Comprehensive coverage of IoT integration and cloud connectivity, including using the ESP 8266 Wi-Fi module and platforms like ThingSpeak and Blynk for remote data monitoring.
- **Web-Connected Control:** Teaches how to leverage the Raspberry Pi's potential for web-connected projects, covering key concepts like setting up a LAMP Web-server and controlling GPIO pins over a web browser.
- **Visual Programming:** Includes exploration of the Node-RED Visual Editor, which simplifies home automation and IoT design using a flow-based programming model to connect hardware, APIs, and online services.
- **Integrated Automation:** Explains the design and implementation of home automation systems that leverage both platforms, covering communication protocols like MQTT and providing blueprints for smart devices and solutions.
- **Code Practicality:** Provides executable code and programming guidance in both C/C++ (for Arduino sketches) and Python (for Raspberry Pi GPIO and networking), preparing the reader for full-stack embedded development.

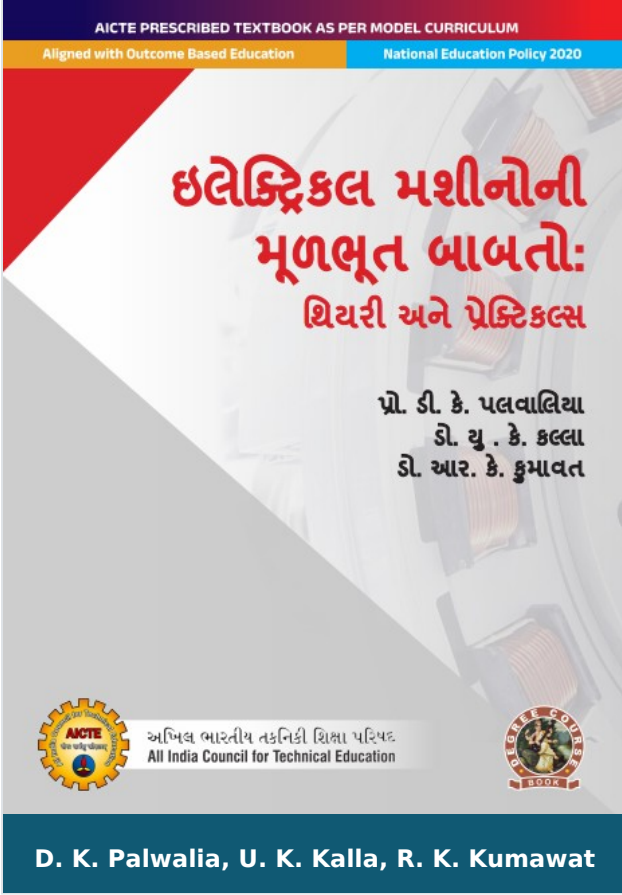
Table Of Contents

- Introduction to Sensors
- IoT with Arduino
- Programming ESP 8266 Module
- Introduction to Raspberry Pi
- IoT Design Using Raspberry Pi
- Exercises

Author

Kamatchi K. S.

P. Jeyanthi, Sankari M., Kamatchi K. S.



Basics of Electrical Machines: Theory and Practicals

Author : D. K. Palwalia, U. K. Kalla, R. K. Kumawat

ISBN 13 : 978-93-55384-61-4

ISBN 10 : 9355384610

E-ISBN 13 : 978-93-55384-61-4

Edition : First

Pages : 488

Type of book : Physical

Year : 2026

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 725.00

Categories : [AICTE Prescribed Textbooks,](#)
[Gujarati Books, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

Basics of Electrical Machines: Theory and Practicals

Author

D. K. Palwalia

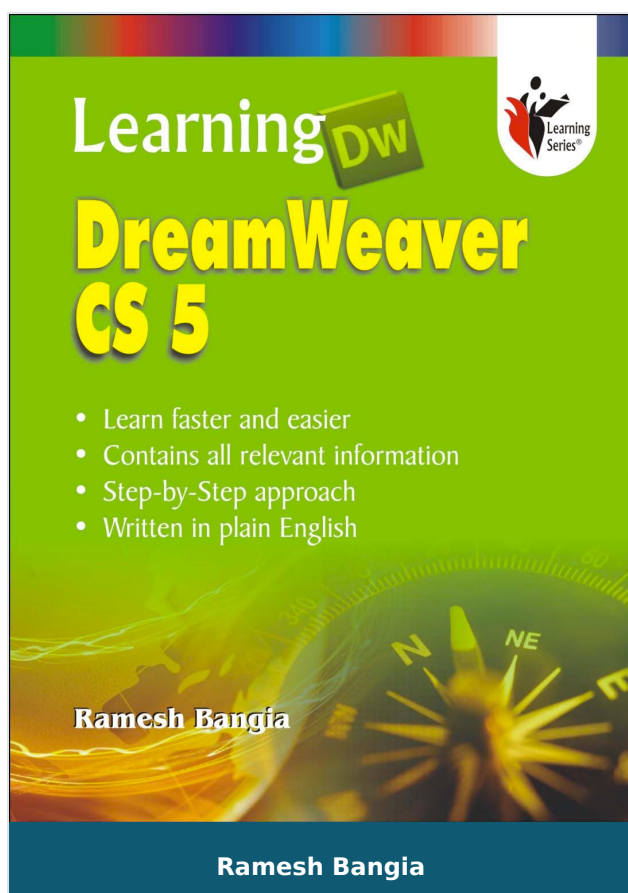
Prof. D. K. Palwalia Professor Department of Electrical Engineering, Rajasthan Technical University, Kota Dr.

U. K. Kalla

Dr. U. K. Kalla Associate Professor Department of Electrical Engineering, MANIT, Bhopal Dr.

R. K. Kumawat

Dr. R. K. Kumawat Assistant Professor Department of Electrical Engineering, I K Gujral Punjab Technical University Amritsar



Learning Dreamweaver CS5

Author :	Ramesh Bangia
ISBN 13 :	978-93-81068-06-9
ISBN 10 :	9381068062
E-ISBN 13 :	978-93-81068-06-9
Edition :	1
Pages :	216
Type of book :	Physical
Year :	2013
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 225.00
Categories :	Book Store, Learning Series, BASIC COMPUTER BOOKS
Condition Type :	New
Country Origin :	India

Product Description

The complete Learning Series has been designed in a very systematic and logical manner. Each topic has been developed from the basic concepts. Practically every major point in the text is illustrated with suitable examples and screen shots. This will help the students in understanding the basic theory and train them in solving every problem systematically, and confidently. A large number of unsolved as well as solved exercises have also been included in the book. The language of the text of the book is lucid, direct and easy-to understand. Each chapter is laced with various diagrams wherever possible. Functions has been explained in full and some of them have been explained in the form of examples. Tips for working faster using the keyboard shortcuts are also provided.

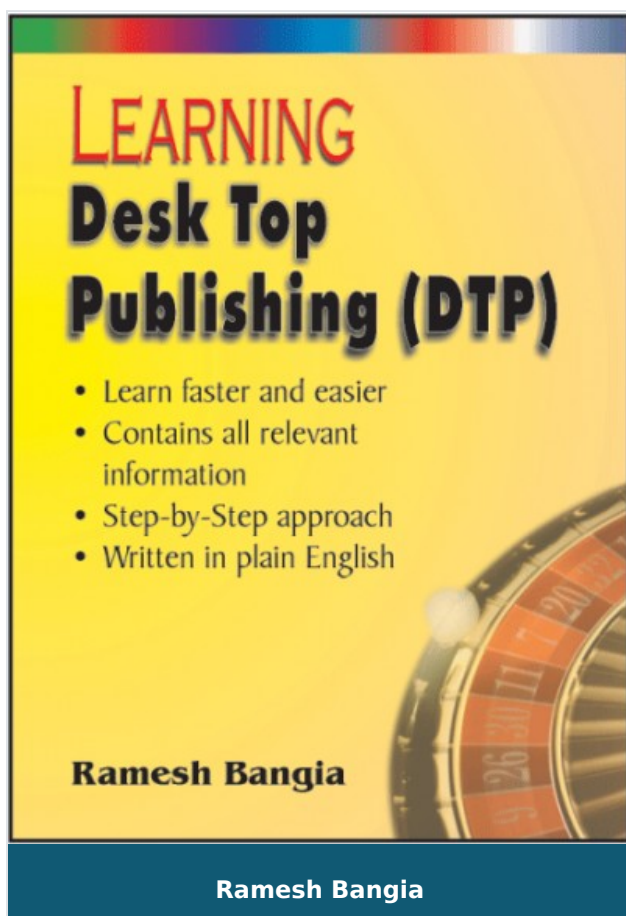
Table Of Contents

- Introduction to Dreamweaver CS5
- Creating a New Page in Dreamweaver CS5
- Adding Graphics and Multimedia
- Working with Table in Dreamweaver CS5
- Working with Forms in Dreamweaver CS5
- Working with Frames in Dreamweaver CS5
- Working with Stylesheets in Dreamweaver CS5
- Creating and Applying Templates
- More Commands of Dreamweaver CS5
- Integrating with other Software
- Keyboard Shortcuts of Dreamweaver CS5
- Questions

Author

Ramesh Bangia

Ramesh Bangia, has been writing computer books on various topics. He has written books for Schools, Training Institutes, Technical Universities, Distance Education Programs, Colleges and General. His tally of books exceeds 500 in number. Trained both in India and Abroad and having studied at IIT Delhi, he becomes automatic choice for most of the publishers in India. Though based in Delhi, his books are popular all over India and are even exported to Middle East and African countries.



Learning Desk Top Publishing (DTP)

Author :	Ramesh Bangia
ISBN 13 :	978-81-90611-66-4
ISBN 10 :	8190611666
E-ISBN 13 :	978-81-90611-66-4
Edition :	First
Pages :	292
Type of book :	Physical
Year :	2016
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 225.00
Categories :	Computer Books - English, Book Store, Learning Series, BASIC COMPUTER BOOKS
Condition Type :	New
Country Origin :	India

Product Description

Learning of a software is both easy and difficult. It depends upon what level you planning to learn. If you are learning only for the working use, then it is very easy. But, when you try to go deep into it, then you realise how difficult it is to master it. Desk Top Publishing (DTP) is such a vast subject that it will take a lot of time to understand it fully. This book has been written in mind to make you aware of the options available in the software and how they can be used. It is like telling the child about the steps and stairs. You are the one who is to climb the stair. This book will just guide you how to use the stairs.

Table Of Contents

- Introduction to Photoshop CS 2
- Introduction to Corel Draw X3
- Introduction to Page Maker 7.0
- Introduction to Illustrator CS 2
- Questions

Author

Ramesh Bangia

Ramesh Bangia, has been writing computer books on various topics. He has written books for Schools. Training Institutes, Technical Universities, Distance Education Programs, Colleges and General. His tally of books exceeds 500 in number. Trained both in India and Abroad and having studied at IIT Delhi, he becomes automatic choice for most of the publishers in India. Though based in Delhi, his books are popular all over India and are even exported to Middle East and African countries.



Computer Aided Machine Drawing Practice

Author :	Kanak Kalita
ISBN 13 :	978-93-55383-41-9
ISBN 10 :	935538341X
E-ISBN 13 :	978-93-55383-41-9
Edition :	First
Pages :	308
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 468.00
Categories :	AICTE Prescribed Textbooks, Gujarati Books, Book Store
Condition Type :	New
Country Origin :	India

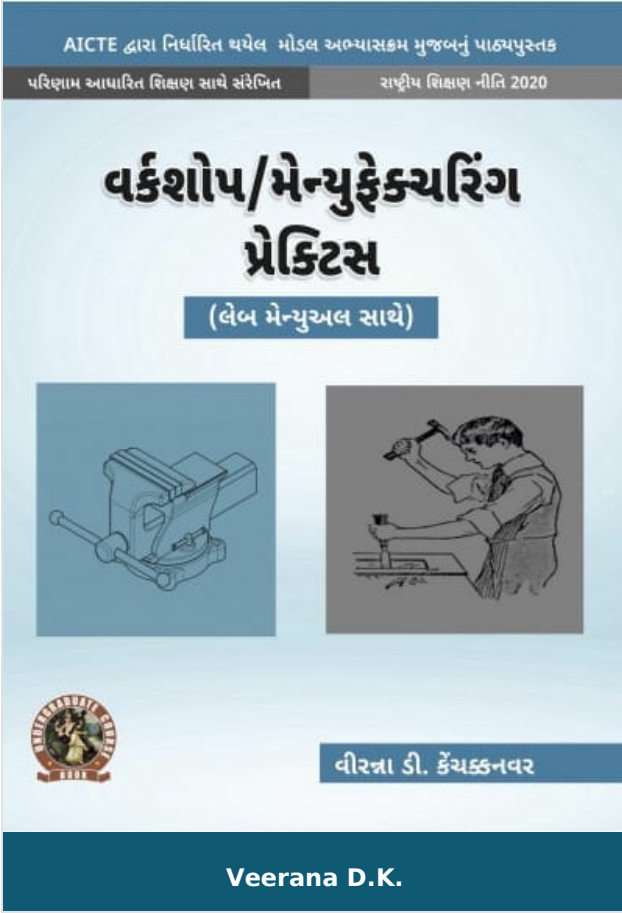
Product Description

Computer Aided Machine Drawing Practice

Author

Kanak Kalita

Dr. Kanak Kalita Associate Professor, Dept. of Mechanical Engineering (ME), Vel Tech
Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, Tamil
Nadu



Workshop / Manufacturing Practices (with Lab Manual)

Author :	Veerana D.K.
ISBN 13 :	978-93-55381-60-6
ISBN 10 :	9355381603
E-ISBN 13 :	978-93-55381-60-6
Edition :	First
Pages :	176
Type of book :	Physical
Year :	2023
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 395.00
Categories :	AICTE Prescribed Textbooks, Gujarati Books, Book Store, Ebooks
Condition Type :	New
Country Origin :	India

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 followed 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 moulding, glass cutting.
7. Metal casting.
8. Welding (arc welding & gas welding), brazing.

9. Laboratory experiments and models.

10. Appendices.

11. References.

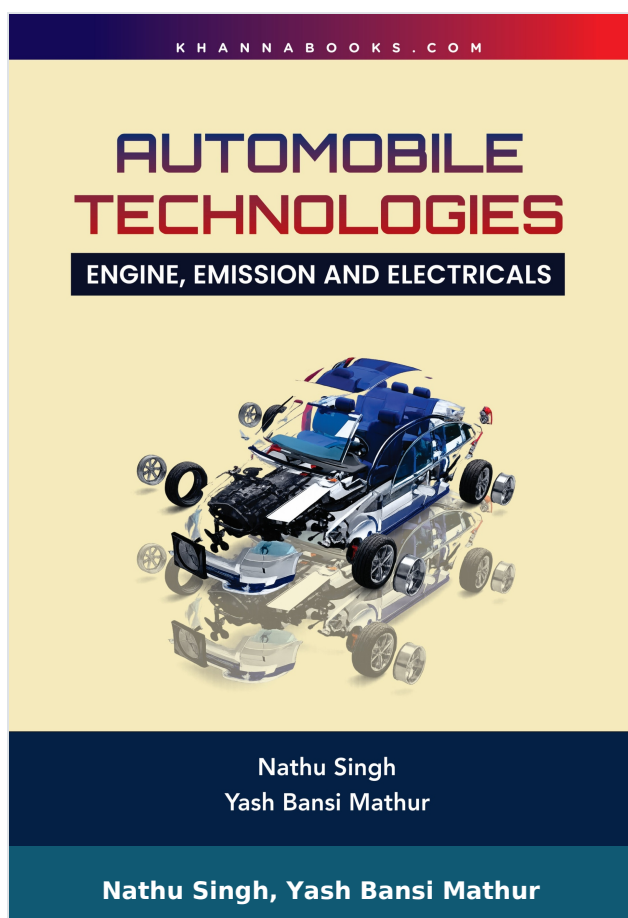
Table Of Contents

- 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
- Manufacturing Methods
- CNC Machining, Additive manufacturing, Fitting operations & power tools
- Electrical & Electronic
- Carpentry, Plastic moulding, glass cutting
- Metal casting, welding (arc welding & gas welding), brazing
- Part- B: Workshop Practice Laboratory
- Appendices
- References

Author

Veerana D.K.

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: I Manufacturing Methods I CNC Machining, Additive manufacturing I Fitting operations & power tools I Electrical & Electronic I Carpentry I Plastic moulding, glass cutting I Metal casting I Welding (arc welding & gas welding), brazing I Laboratory experiments and models I Appendices I References



Automobile Technologies (Engine, Emission And Electricals)

Author : Nathu Singh, Yash Banshi Mathur

ISBN 13 : 978-93-55389-63-3

ISBN 10 : 9355389639

E-ISBN 13 : 978-93-55389-63-3

Edition : First

Pages : 280

Type of book : Physical

Year : 2026

Language : English

Publisher : Khanna Publishing House

M.R.P : Rs 495.00

Categories : [New Arrivals, Automobile Engineering, Book Store](#)

Condition Type : New

Country Origin : India

Product Description

Automobile Technologies (Engine, Emission And Electricals)

Automobile Technology-II is a comprehensive and academically rigorous guide designed to provide a deep dive into the advanced mechanical and electrical systems of modern vehicles. Developed in alignment with the latest National Education Policy, this textbook bridges the gap between foundational automotive principles and the rapidly evolving technological trends of the current market. The authors, Nathu Singh and Yash Bansi Mathur, meticulously cover critical areas including advanced engine designs, sophisticated vehicle control mechanisms, and the intricate electrical systems that define contemporary automotive engineering.

The book's primary purpose is to equip readers with both the theoretical knowledge and the practical technical skills necessary for professional competency in the automotive field. By exploring the relationship between heat, work, and gas properties through thermodynamics, and providing detailed breakdowns of components like reciprocating engines and ignition systems, it offers a holistic view of vehicle performance and efficiency. This makes it an essential resource for students of automobile engineering, professional technicians seeking to upgrade their skills, and researchers interested in the latest advancements in fuel economy, emission reduction, and vehicle safety. Whether you are preparing for gainful employment or looking to master complex engine supercharging techniques, this book serves as a definitive roadmap for excellence in automobile technology.

Salient Features:

- **Advanced Thermodynamic Insights:** Detailed exploration of gas laws, standard cycles like Otto and Diesel, and the principles of thermodynamics as they apply to internal combustion engines.

- **Comprehensive Suspension Mechanics:** In-depth analysis of various suspension types, including leaf springs and shock absorption, focusing on maintaining vehicle stability and load-bearing capacity.
- **Precision Steering Systems:** Extensive coverage of steering gear mechanisms, from manual rack and pinion setups to modern hydraulic and electric power steering (EPS) systems.
- **Specialized Engine Components:** A thorough breakdown of reciprocating and rotating engine parts, including pistons, crankshafts, and the unique working principles of Wankel engines and gas turbines.
- **Cutting-Edge Electrical Systems:** Comprehensive guides to engine starting circuits, digital ignition systems, and modern lighting technologies such as halogen-quartz and sealed beam headlamps.
- **Advanced Induction Techniques:** Dedicated sections on engine supercharging, turbocharging, and scavenging processes aimed at improving engine power and volumetric efficiency.
- **Practical Vehicle Maintenance:** Technical focus on wheel alignment parameters like caster, camber, and toe, alongside common failure diagnostics for automotive air-conditioning systems.
- **Future-Ready Fuel Technologies:** Insightful discussion on the production and application of alternative fuels, such as methanol produced from biomass or solid waste, for sparking ignition engines.

Table Of Contents

- : Motor Vehicle Technology -II
- : Automobile Engine System -II
- : Automobile Electrical Systems -II
- : Automobile Electrical Equipment -II
- : Alternative Fuel and Emission Control -II

Author

Nathu Singh

Nathu Singh,

Yash Banshi Mathur

Yash Banshi Mathur