
Preface

This book fully covers the latest syllabus effective August 2007 of the undergraduate engineering course titled *Electronic Devices and Circuits* offered by JNTU, Hyderabad.

The book will serve the purpose of a text to the engineering students of degree, diploma, AMIE and graduate IETE courses and as useful reference for those preparing for competitive examinations. Also, it will meet the pressing need of interested readers who wish to gain a sound knowledge and understanding of the principles of electronic devices and circuits. Practicing engineers will find the content of significant relevance in their day-to-day functioning.

The book contains 8 chapters. Chapter 1 deals with Electron Dynamics and CRO. Chapter 2 is devoted to Junction Diode Characteristics. Chapter 3 deals with Rectifiers, Filters and Regulators. Chapter 4 explains various types of Transistors like Bipolar Junction Transistor, Field Effect Transistor, MOSFET and Unijunction Transistor. Chapter 5 covers Transistor Biasing and Stabilisation. Chapter 6 contains a detailed study of various types of Small Signal Amplifiers. Chapter 7 discusses the different types of Feedback Amplifiers and Chapter 8 presents a study of Oscillators.

All the topics have been profusely illustrated with diagrams for easy understanding. Equal emphasis has been laid on mathematical derivations as well as their physical interpretations. Illustrative examples are discussed to emphasise the concepts and typical applications.

A set of questions and exercises has been given at the end of each chapter with a view to help the readers increase their understanding of the subject and to encourage further reading. Four sets of April/May 2008 Question Papers are given in Appendix D with solutions to the exercise problems.

Web supplements include a wide variety of resources including Solved Question Paper 2006, and 2007 an excellent collection of additional questions.

We are highly indebted to the management of our institutions for encouraging us from time to time and providing all the necessary facilities. Thanks are due to our colleagues, and the students for their valuable suggestions and assistance in the preparation of the manuscript.

We are grateful to McGraw-Hill Education Publishing Company Limited, for getting the manuscript reviewed by experts, providing feedback and for bringing out this book in a short span of time, and also to Mrs Vibha Mahajan

of McGraw-Hill Education for stimulating interest in this project. We are also thankful to Mr S Sankar Kumar and Mr J Venkateshwaran for efficiently wordprocessing the major part of the manuscript.

We wish to thank the reviewers of this edition for their in-depth comments.

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Finally, we would like to extend our warmest thanks to our respective wives, Mrs Kalavathy Salivahanan, Mrs Andal Suresh Kumar and Mrs Radha Vallavaraj, for their moral support and constant encouragement and to our children, S Santhosh Kanna and S Subadesh Kanna, S Sree Naga Gowri and S Sree Naga Vani, and V Nithish Raj, for their enormous patience and cooperation.

Constructive suggestions and corrections for the improvement of the book would be most welcome and highly appreciated.

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