



Analog and Digital Device Applications

**F.Y.B.Sc. Electronic Science
SEM-II, P-II**

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First Edition

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Preface

I have great pleasure to present this book on Analog and Digital Device applications, F.Y.B.Sc. Electronic Science SEM-II,P-II. It is written as per the 2019 pattern, Choice Base Credit System (CBCS) syllabus of Savitribai Phule Pune University, Pune-411007.

The author have tried his level best to simplify the difficult concept in electronic science with neat diagram and simple mathematical equation.

The basics of electronics which is required to understand the concept of Operational Amplifier is covered. The understanding of IC-555 as Astable Multivibrator is made very simple by drawing the diagrams. The applications of Operational Amplifier and IC-555 are made very simple.

The data converters such as Analog to Digital Converter (ADC) and Digital to Analog Converter (DAC) are explain very symmetrically. Digital thermometer with simple block diagram is explain. I thank to Publisher IIP Publishing House (IPH) www.iiponline.org for helping me to publish this book.

Dr. Arif Tamboli

Dr. Rajendran S. Gosavi

Acknowledgement

Firstly, I thank the Almighty Allah, Creator of Universe for making me physically and mentally capable of undertaking this work.

I offer my Sincere thanks to the management of Poona College of Arts, Science and Commerce Camp-Pune-411001, Y and M, Anjuman Khairul Islam Mumbai for providing me the necessary facility to complete the work.

I owe a special debt of gratitude to Dr. Aftab Anwar Shaikh, Principal Poona College of Arts, Science and Commerce, Camp, Pune-411001, Dr. Arunkumar Walunj, Head Department of Electronic Science, Dr. Aif Shaikh, Ex-Head Department of Electronic Science, Mr. Z.B. Pathan Ex-Head Department of Electronic Science, Dr. Gulam Rabbani my research Guide for cooperation, motivation and continuous help. Dr. Mahtab Alam Head Department of Computer Science.

I express my thanks to Dr. S. N. Kotwal and Mr. J. B. Shikalger for their blessings and encouragement. The present work is dedicated to my beloved late parents, whose love and affection apart from their moral support made it possible to complete. My wife, Mrs. Shabana, son Azim and lovely daughter Alfiyadeserve special mention for their continuous support and sacrifice.

Finally I would like to thank all teaching and non teaching staff of Electronic Science Department of Poona College, Camp, Pune-411001 friends, and all those who are directly or indirectly involved in helping me to complete this work.

Dr. Arif Tamboli

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Basic operation and block diagram: Digital thermometer.

About the Book

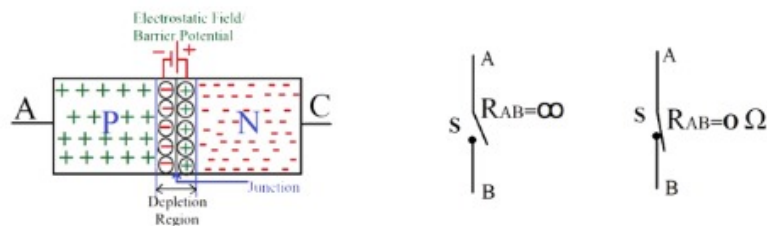


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