

RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

New Scheme Based On AICTE Flexible Curricula

Electronics & Communication Engineering IV-Semester

EC406 Simulation Lab

COURSE CONTENTS: Introduction to circuit simulation software (TINA-PRO/ PSPICE/ CIRCUIT MAKER). Study of the key features and applications of the software in the field of Electronic Circuits, Electronic Instrumentation and Network Analysis.

Design, Optimization and simulation of;

1. Basic Electronic circuits (examples rectifiers, clippers, clampers, diode, transistor characteristics etc).
2. Transient and steady state analysis of RL/ RC/ RLC circuits, realization of network theorems.
3. Use of virtual instruments built in the software.

Introduction to PCB layout software

Overview and use of the software in optimization, designing and fabrication of PCB pertaining to above circuits simulated using above simulation software. Students should simulate and design the PCB for at least two circuits they are learning in the current semester.