

MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY

ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT

Academic Year: 2018-2019

Course Code: ES 322 EC

Course Title: ELECTRONIC ENGINEERING – II

Year and Semester: II Year I Semester, Section: A

Contact Hours per week: 3

Course Coordinator: MD. ZAKIR HUSSAIN, Asst.Prof.

Course Coordinator Phone: 9949-426-362

Course Coordinator Email: zakir.hussain@mjcollege.ac.in

Course Coordinator URL: <http://tinyurl.com/zakirhussain-eced>

Course Coordinator Location: Room No. 5405

Course Coordinator Availability: Check Class Time Table

➤ PRE-REQUISITE COURSES AND ASSUMED KNOWLEDGE AND CAPABILITIES:

1. NIL

➤ Course Objectives

1. Identify the components that effect the frequency response and analyze the single and multi-stage amplifiers
2. Recognize the type of feedback and analyze its effect on amplifier's characteristics
3. Calculate the frequency of oscillation for different types of oscillator circuits suited for various applications using Barkhausen's criterion
4. Identify the importance of power amplifiers and calculate the efficiencies of class -A, B, AB and examine the effect on distortion. Identify the linear and non-linear wave shaping circuits for various waveforms & analyze their response

➤ Course Outcomes

1. Ability to design feedback amplifiers circuit with its applications
2. Ability to analyze and design various oscillators
3. Ability to design power amplifier for various applications
4. Ability to design various filters required
5. Ability to design clipping and clamping circuits and various multi-vibrators

➤ **OVERVIEW OF LEARNING ACTIVITIES**

- Lectures and class discussions
- Tutorials
- Independent assignment work

➤ **OVERVIEW OF LEARNING RESOURCES**

❖ **PRESCRIBED BOOKS**

- Jacob Millman, Christos Halkias, Satyabrata jit, **Electronics Devices and Circuits**, 3rd ed., McGraw Hill Education (India) Private Limited, 2010.
- Jacob Millman, Christos Halkias, Chetan Parikh, **Integrated Electronics**, 2nd ed., McGraw Hill Education (India) Private Limited, 2011.
- Donald L Schilling & Charles Belove, **Electronics Circuits, Discrete & Integrated**, 3rd ed., McGraw Hill Education (India) Private Limited, 2002.
- Jacob Millman and Herbert Taub, Pulse, **Digital and Switching waveforms**, 3rd ed., McGraw Hill Education (India) Private Limited, 2011.

➤ **OVERVIEW OF ASSESSMENT**

- Internal assessment for this course comprises of
 1. Class Tests
 2. Assignments
 3. Quizzes
- External assessment for this course comprises of
 1. University Exam

Course Coordinator

Module Coordinator

Program Coordinator

Head, ECED