

EEM33 - Analog Electronics.

738

REG. NO

OCTOBER 2021

Time: Three hours

Maximum Marks: 75

- Note:
1. Answer ALL the questions in PART-A (1 mark each)
 2. Answer any ONE question from each unit in PART-B (3 marks each)
 3. Answer any ONE question from each unit in PART-C (10 marks each)
 4. The question paper contains TWO Pages

PART-A (1x10=10)

1. Give one application of diode.
2. What is voltage regulator?
3. Draw PNP transistor.
4. What are the modes of MOSFET?
5. What are the biasing methods of transistor amplifier?
6. Define bandwidth.
7. What are the different types of multivibrators?
8. Give the classification of oscillators.
9. Define CMRR.
10. What is meant by modulation?

PART-B (3x5=15)

UNIT-I

11. Explain the operation of zener diode as a voltage regulator.
12. Explain about 79xx regulator.

UNIT-II

13. Compare JFET and BJT.
14. Explain transistor as an amplifier.

UNIT-III

15. Explain the operating regions of transistor.
16. Compare CB, CE and CC amplifiers.

UNIT-IV

17. Explain the condition for oscillation.
18. Explain about diode clipper circuit.

UNIT-V

19. Explain the need for modulation.
20. Draw the block diagram of an op-amp and explain.

PART-C (10x5=50)

UNIT-I

21. Explain the working of a full wave rectifier with necessary diagrams.
22. i) Explain the effect of loading on the output voltage of voltage regulator.
ii) Explain the effect of change in input voltage of voltage regulator.

UNIT-II

23. Draw the input-output characteristics of CE transistor configuration and explain.
24. Explain construction, working and drain characteristics of JFET.

UNIT-III

25. Explain about self-bias in voltage amplifier circuit.
26. Describe the frequency response characteristics of a RC coupled amplifier.

UNIT-IV

27. Explain about push-pull amplifier with necessary diagrams.
28. Explain about RC phase shift oscillator.

UNIT-V

29. Explain inverting and non-inverting amplifier. Derive the voltage gains for them.
30. i) List the characteristics of ideal op-amp.
ii) Explain about zero crossing detector, summer circuits.
