RAVINDRA COLLEGE OF ENGINEERING FOR WOMEN

II B tech -I Semester (R19)
Branch: ECE
Academic year 2020-21
Subject : Electronic Devices and Circuits(19A04302T)

UNIT: 4

S No	Questions (Short)	CO	Cognitive Level
1	What is operating point?	C202.6	Remember
2	Define Biasing & Stabilization.	C202.6	Remember
3	What are the factors that affect the operating point?	C202.6	Remember
4	What are the requirements of biasing circuit?	C202.6	Remember
5	Explain the condition for biasing of zero current drift.	C202.6	Remember
6	Compare CB, CE and CC transistor configurations.	C202.4	Remember
7	Why BIT is called as a current control device?	C202.4	Remember
8	Define diffusion capacitance.	C202.4	Remember
9	What is meant by base width modulation?	C202.4	Remember
10	List two important parameters which affect the stability of the Q-point.	C202.6	Remember
11	Discuss the importance of selecting an operating point in a transistor	C202.6	Remember

S No	Questions (Essay)	CO	Cognitive Level
1	Explain the criteria for fixing operating point.	C202.6	Understand
2	Draw and explain the analysis of Fixed bias circuit and derive the stability factors S, S^1 and S^{11}.	C202.6	Analyse
3	Discuss Self-bias with the help of Stability factors and give suggestions to improve stability of operating point.	C202.6	Understand
4	Explain with neat sketch Collector to Base bias circuit and derive the stability factors S, S^1 and S^{11}.	C202.6	Understand
5	Explain in detail about thermal runaway, thermal resistance and prove the condition for thermal stability using biasing circuit.	C202.6	Understand
6	Explain the operation of CC configuration of BJT and its input and output characteristics briefly.	C202.4	Understand
7	Explain about Punch through and Base width modulation.	C202.4	Understand
8	What is meant by thermal run-away? Briefly explain.	C202.4	Remember
9	Draw and explain the characteristics of PNP transistor in CE configuration.	C202.4	Apply
10	Illustrate the input and output characteristics of all three configurations of a BJT transistor. Also give the important equations related to those configurations.	C202.4	Apply