

Q-5	Attempt all questions	(14)
	a) Explain in details AND gate with two inputs logic diagram and its truth table.	5
	b) Explain in details parameters of JFET.	6
	c) Give classification of amplifier.	3
Q-6	Attempt all questions	(14)
	a) Explain in details Barkhusen's criterion for self sustained oscillations in details.	5
	b) Give characteristics of Ideal Op-Amp.	5
	c) Simplify the following Boolean expression: $Y = (A+B+C) \cdot (A+B)$	4
Q-7	Attempt all questions	(14)
	a) Explain in details NAND Gate as a universal gate.	6
	b) Explain in details Half adder and full adder circuits.	6
	c) Explain Binary addition with examples.	2
Q-8	Attempt all questions	(14)
	a) Explain in details practical circuit of transistor amplifier.	5
	b) Explain in details NOT Gate with its logic circuit diagram.	5
	c) State and prove any two De Morgan's theorems.	4

