



I B.Tech- II Semester Regular Examinations, June/July-2025

Electronic Circuit Analysis-24EC11RC06

SCHEME OF VALUATION

Q.No	Description
1a)	CE transistor hybrid- π model diagram -----> 4M Explanation of parameters -----> 3M
1b)	CE amplifier equivalent circuit diagram at high frequencies with no load -----> 3M B-cut off frequency derivation -----> 4M
2a)	Miller's theorem statement -----> 2M Miller's equivalent circuit diagrams -----> 2M Miller capacitance Derivation -----> 3M
2b)	CS FET amplifier equivalent circuit diagram at high frequencies -----> 3M Derivation -----> 2M Voltage gain equation -----> 2M
3a)	Two stage RC coupled CE amplifier circuit diagram -----> 3M Over all current gain -----> 2M Input resistance -----> 2M
3b)	Effect of bypass capacitor -----> 2M Effect of coupling capacitor -----> 2M Necessary diagrams -----> 3M
4a)	N stage cascaded amplifier diagram -----> 3M Overall band width derivation -----> 2M Gain derivation -----> 2M
4b)	Basic Darlington circuit diagram -----> 3M Current gain derivation -----> 2M Voltage gain derivation -----> 2M
5 a)	List of Negative feedback amplifier characteristics -----> 4M Sensitivity derivation -----> 3M
5 b)	Block diagram of Current series feedback amplifier -----> 1M Gain derivation -----> 2M Input resistance derivation -----> 2M Out put resistance derivation -----> 2M
6 a)	Sampling topologies sketch -----> 2M Mixing topologies sketch -----> 2M Explanation -----> 3M
6 b)	Block diagram of Voltage shunt feedback amplifier -----> 1M Gain derivation -----> 2M Input resistance derivation -----> 2M Out put resistance derivation -----> 2M
7 a)	RC phase shift oscillator using FET circuit diagram -----> 3M Derivation of frequency of oscillations -----> 4M

7 b)	Frequency stability explanation -----> 3M About crystal oscillator -----> 4M
8 a)	Generalized equations for LC oscillator ----->2M Colpitt's oscillator circuit diagram -----> 2M Frequency of oscillations equation derivation ----->3M
8 b)	Minimum 5 points about Comparison of Hartley , Colpitt's and clapp oscillator ----->7M
9 a)	Complementary symmetry Class B pushpull power amplifier circuit diagram -----> 2M Operation -----> 3M Input & output Timing waveforms -----> 2M
9 b)	Ac output power ----->2M Dc input power ----->2M Efficiency calculation ----->3M
10 a)	Stagger tuned amplifier circuit diagram ----->2M Explanation ----->2M Frequency response sketch ----->3M
10 b)	Single tuned amplifier circuit diagram ----->2M Bandwidth derivation ----->5M

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