ACE
Engineering College
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An AUTONOMOUS Institution

ACE-R20

Question Paper Code: EE303PC

Semester End Examination
II B. Tech- I Semester- MARCH-2022
ANALOG ELECTRONICS
(Electrical & Electronics Engineering)

Time: 3 Hours

Max. Marks: 70

H. T. No

Answer any 5 Questions out of 8 Questions from the following

Q.No	Question	Marks
1. a)	With the help of neat diagrams, explain the operation of a full wave rectifier and also derive the expressions for ripple factor and efficiency.	7
b)	With the help of neat diagrams explain the operation of a two level diode clipper.	7
2. a)	Explain the operation of a P-N diode and also draw the V-I characteristics of it.	7
b)	Draw the h-parameter equivalent circuit for a typical common emitter amplifier and derive expression for A_i, A_v, R_i and R_o	7
3. a)	Distinguish between enhance mode and depletion mode of MOSFET.	7
b)	Explain the important characteristics of CC amplifier.	7
4. a)	What are the advantages of Class B amplifier over Class A amplifier?	7
b)	Write short notes on RC Coupled multi-stage amplifiers	7
5. a)	Draw the ac equivalent circuit for the dual input and balanced output differential amplifier.	7
b)	Explain the principle of operation of class-A power amplifier with a neat sketch.	7
6. a)	How does negative feedback affect the performance of an inverting amplifier.	7
b)	Discuss about Voltage –Shunt Feedback Amplifier in detail.	7
7. a)	Explain the principle operation of the colpitts oscillator	7
b)	Draw the block diagram of operational amplifier and explain it in detail.	7
8. a)	Draw and explain the operation of integrator using op-amp in detail	7
b)	Draw the circuit diagram and explain the working of a inverting and non inverting amplifier using differential configuration.	7