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Examination: Odd Semester Examination 2024 (Backlog)

Paper Name: Analog Electronic Circuits
Time: 3 Hours

Paper Code: BTCSE-301
Maximum Marks: 75

Section A

Note: Attempt all the questions. Each question carries equal marks.

(7x5=35)

Q. No.	Question	Marks	CO	BL
1.	Explain Characteristics of a PN junction diode.	5	CO1	BL3
2.	Establish relation between α and β of a BJT.	5	CO2	BL5
3.	Construct and evaluate the gain of an inverting amplifier using op-amp.	5	CO4	BL4
4.	Explain working and construction of a JFET.	5	CO3	BL2
5.	Discuss ideal characteristics of an op-amp.	5	CO4	BL3
6.	Draw and explain Schmitt Trigger.	5	CO5	BL3
7.	Discuss CE configuration of a PNP transistor configuration	5	CO2	BL2

Section B

Note: Attempt any four (4) Questions

(4x10=40)

Q. No.	Question	Marks	CO	BL
1.	Draw and explain of a full wave bridge and center tap rectifier.	10	CO1	BL5
2.	Draw and explain input and output characteristics of CB amplifier.	10	CO2	BL4
3.	Explain construction and working of depletion mode MOSFET.	10	CO3	BL3
4.	Explain differential amplifier with the help of a neat diagram.	10	CO4	BL3
5.	Draw and explain instrumentation amplifier.	10	CO5	BL2

6.	Write a short note on any two of the followings: a. Zener Diode b. Amplifiers c. Light Emitting Diodes (LED) d. Drift current	10	CO1, CO3	BL2
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BL: Blooms Taxonomy Level; (1-remembering, 2-understanding, 3-apply, 4-analyse, 5- evaluate, 6-create)