GALGOTIAS UNIVERSITY

ADMISSION NUMBER

School of University Polytechnic

Diploma in Electrical Engineering
Semester End Examination - Jul 2024

Duration : 180 Minutes
Max Marks : 100

Sem III - N1DI303B - Basic Electronics Engineering

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	What is a PN junction?	K1(2)
2)	Describe combinational circuit.	K2(4)
3)	Explain the operation of an op-amp adder circuit.	K2(6)
4)	Compute the concept of a scale changer using an op-amp.	K3(9)
5)	Carryout the display devices.	K3(9)
6)	Determine the pin diagram of 8085 microprocessor and explain.	K5(10)
7)	sketch the 4 is to 1 multiplexer.	K4(12)
8)	Determine the maximum value of the AC voltage required at the input. A halfwave rectifier is utilized to supply 20 volt dc to a resistive load of 400 ohm. The diode used in halfwave resctifier has a forward resistance of 40 ohm.	K5(15)
9)	Defend the primary purpose of using op-amp configurations like inverting and non-inverting amplifiers.	K5(15)
10)	Discuss how a full adder can be implemented using multiple half adders.	K6(18)