


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2023			
Course: Microprocessor Based Control System Program: B.Tech ADE Course Code: ECEG3043		Semester : V Time : 03 hrs. Max. Marks: 100	
Instructions:			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Define the microprocessor and microcontroller. List the different types of microprocessor.	4	CO1
Q 2	State the different types of memory of microcomputer systems.	4	CO1
Q 3	Define the three-byte instructions in the processor.	4	CO2
Q 4	List the format of memory direct addressing in the processor.	4	CO2
Q 5	State the machine control instructions used to control the microprocessor execution.	4	CO2
SECTION B (4Qx10M= 40 Marks)			
Q 6	Describe and sketch the diagram of Von-Neumann model.	10	CO3
Q 7	Explain the timing diagram for the STA instruction.	10	CO3
Q 8	Classify the instructions according to word size.	10	CO3
Q 9	Explain the machine cycle in the 8085 microprocessor. OR If the instructions CALL and RET were not available in the 8085, would it still be possible to write subroutines. State the process of subroutine be called,.	10	CO4
SECTION-C (2Qx20M=40 Marks)			
Q 10	Discuss the architecture of 8085 microprocessor with the help of its internal block schematic diagram	20	CO4
Q 11	Describe the various types of interrupt. List the significance of priority of the interrupt. OR Explain the process of specifying the data to be operated on by the instruction.	20	CO4