Name: Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2023

Course: Distributed Control System **Semester : VII**
Program: B.Tech Mechatronics **Time : 03 hrs.**
Course Code: MECH4036P **Max. Marks: 100**

Instructions:

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	List the typical automation function at the plant management level.	4	CO1
Q 2	State the issues in distributed control system implementation.	4	CO1
Q 3	Outline the features of interactive controller at the field stations.	4	CO2
Q 4	List the most common functions of intermediate stations.	4	CO2
Q 5	Identify the parameters in the process control level.	4	CO2

SECTION B
(4Qx10M= 40 Marks)

Q 6	Describe the operational principle of the field multiplexer.	10	CO3
Q 7	Discuss the basic requirements on field bus standards.	10	CO3
Q 8	Describe the main characteristics features of distributed computer control systems.	10	CO3
Q 9	Explain the screen partition of operator display screen. OR Discuss the major features are built by the user in the plant specific displays.	10	CO4

SECTION-C
(2Qx20M=40 Marks)

Q 10	Sketch the internal organization of field multiplexer .Explain the characteristics of communication networks in distributed computer control systems.	20	CO4
Q 11	Describe the data transmission techniques in transmission media. OR Select and explain the medium access control procedure in token bus.	20	CO4