PRN:		Course Code :	P71PC103

First Year **M. Tech.** End Semester Examination Winter 2024

Industrial Automation

000446

Day and Date: Wed - 4 DEC 2024 Max Marks: **50**

Time : 10:30AM To 12:30PM Duration: **02** hrs

Instructions:
1. All questions are compulsory.
2. Assume suitable data wherever necessary and mention it clearly.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following Question.**			
	a)	Explain basic control concept with example.	10	2	1
		OR			
	b)	List the advantages of automation in industry.	10	2	1
Q.2		**Attempt the following Question.**			
	a)	What is seal-in circuit?	10	3	2
		OR			
	b)	Explain the generalized architecture of DCS with neat sketch	10	3	2
		Attempt the following Question.			
Q.3	a)	Discuss and compare the different architecture of DCS.	10	3	2
		OR			
	b)	List different configurations of LCU, explain the various blocks in LCU	10	2	2
Q.4		**Attempt the following Question.**			
	a)	Explain in detail about low and High level operator interfaces in DCS.	10	3	2
		OR			
	b)	Express the application of DCS in oil industry	10	3	2
Q.5		**Attempt the following Question.**			
	a)	Explain in detail about direct digital control with neat block diagram.	10	3	3
		OR			
	b)	Discuss in detail about SCADA with neat block diagram.	10	2	3

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