



D. Y. Patil College of Engineering, Akurdi, Pune-4110044.  
**Dept of Instrumentation and Control Engineering**

Date: 11/3/2022

**Class T. E. Instrumentation and Control, AY 2021-22**

**Sub: Industrial Automation-II**

**Assignment No 1**

1	Explain the Architecture of Typical Distributed Control System	
2	Explain typical I/O configuration used in DCS.	
3	Enlist different functions of Distributed Control System in Plant Automation.	
4	Describe hardware of distributed Control System.	
5	Explain typical software platforms of DCS System.	
6	Distinguish between PLC and DCS.	
7	What are the advantages of DCS over PLC in Industrial Automation?	
8	What is redundancy in DCS?	
9	What are the basic elements of distributed control system?	
10	Explain following components used in DCS Process variables, software variables, tags,	
11	Why DCS is called distributed?	
12	Which programming language is used in DCS?	
13	How Human Machine Interface (HMI), Alarms, Trends, Databases	
14	Explain Sequential Controllers for Batch Processing.	
15	Distinguish between SCADA and DCS.	

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