DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Regular End Semester Examination – Summer 2022

Course: B. Tech.   Branch :   Computer Science & Engineering   Semester : VIII

Subject Code & Name: BTCOE802A

Introduction to Industry 4.0 and Industrial Internet of Things

Max Marks: 60   **Date:07/07/2022**   **Duration: 3.45 Hr.**

Instructions to the Students:
1. All Questions are Compulsory
2. Draw neat diagram wherever necessary.
3. Figures to right indicates full marks
4. Assume suitable data wherever necessary and mention it clearly

		(Level/CO)	Marks
Q. 1	**Solve Any Two of the following.**		
A)	What is Industry 4.0? Explain with Advantages of Industry 4.0.	Synthesis	**06**
B)	What is Machine to Machine (M2M) Communication in IoT?	Remember	**06**
C)	Explain 5 key principles of Lean System in IoT.	Understand	**06**
Q.2	**Solve Any Two of the following.**		
A)	Explain Product Life Cycle (PLM IoT) with its 4 stages.	Understand	**06**
B)	What are Industry 4.0 Cyber Security Challenges?	Synthesis	**06**
C)	Explain role and challenges of AI in IIoT and Industry 4.0.	Understand	**06**
Q. 3	**Solve Any Two of the following.**		
A)	What are typical industrial communication requirements?	Analysis	**06**
B)	What is DeviceNet?Explain Features of DeviceNet.	Remember	**06**
C)	What are IIoT Processing Challenges?	Remember	**06**
Q.4	**Solve Any Two of the following.**		
A)	Explain IIoT analytics types and state IIoT analytics challenges.	Remember	**06**
B)	State need of cloud computing for IIoT.	Understand	**06**
C)	Discuss the reason of usefulness and impact of deep learning in IIoT.	Synthesis	**06**
Q. 5	**Solve Any Two of the following.**		
A)	How can IoT improve safety and security?	Understand	**06**
B)	Explain R Programming as data analytics tool in IoT.	Application	**06**
C)	Explain three layers based software defined Networks (SDN).	Synthesis	**06**

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