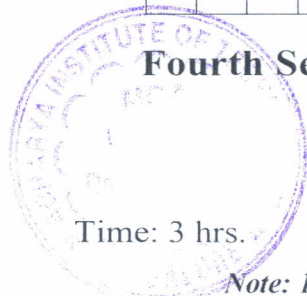


# CBCS SCHEME

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BMT405B



## Fourth Semester B.E./B.Tech Degree Supplementary Examination, June/July 2024 Industrial IoT(IIoT)

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.  
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1			M	L	C
Q.1	a.	Discuss the different phases of development in the industries.	10	L2	CO1
	b.	Explain the role of IoT and IIoT in industry.	10	L2	CO1
OR					
Q.2	a.	Explain the evolution of industry 4.0 and differentiate between IoT and IIoT.	10	L2	CO1
	b.	Discuss the architecture of IIoT.	10	L2	CO1
Module – 2					
Q.3	a.	Define sensor. Explain the different types of sensors.	10	L2	CO2
	b.	Illustrate the thermal Actuator and types of thermal actuator	10	L3	CO2
OR					
Q.4	a.	Define Actuator. Explain the different types of actuator.	10	L2	CO2
	b.	Illustrate the role of microcontroller and embedded PC in IIoT.	10	L3	CO2
Module – 3					
Q.5	a.	Define Augmented Reality. Explain the various types of technologies in AR.	10	L2	CO3
	b.	Illustrate the lean manufacturing system and implementation of Lean manufacturing system.	10	L3	CO3
OR					
Q.6	a.	Define Virtual Reality. Explain the types of technology in virtual reality.	10	L2	CO3
	b.	Illustrate the big data and advanced big data analytics.	10	L3	CO3
Module – 4					
Q.7	a.	Discuss HART protocol with its components and features.	10	L2	CO4
	b.	Illustrate the field bus with its components and features of industrial transmission.	10	L3	CO4
OR					
Q.8	a.	Discuss profibus protocol with its features and also components.	10	L2	CO4
	b.	Illustrate controller area network of industrial transmission.	10	L3	CO4
Module – 5					
Q.9	a.	Illustrate the application of IIoT in oil and gas industries with examples.	10	L3	CO5
	b.	Explain the role of IIoT in health care with example.	10	L2	CO5
OR					
Q.10	a.	Explain the application of IIoT in manufacturing industry.	10	L2	CO5
	b.	Illustrate the application of IIoT in smart office with example.	10	L3	CO5