CBCS SCHEME - Summer Semester

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BETCK205H

Second Semester B.E./B.Tech. Degree Examination, June/July 2025
Introduction to Internet of Things (IoT)

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.	Classify network types based on physical topologies and connection types with schematic diagrams.	10	L1	CO1
	b.	Explain OSI reference model of a network.	10	L1	CO1
		OR			
Q.2	a.	Explain evolution of IoT with neat diagram.	10	L1	CO1
	b.	Explain link layer and internet layer of TCP/IP Model.	10	L1	CO1
		Module – 2			
Q.3	a.	Explain Multimedia and Hybrid sensing.	10	L1	CO2
	b.	Outline a simple sensing operation. Classify various sensors based on 3 parameters.	10	L1	CO2
		OR			
Q.4	a.	Outline the functional blocks of a typical sensor node in IoT with a diagram.	10	L2	CO2
	b.	Summaries the major factors influence the choice of sensors in IoT based sensing solutions.	10	L2	CO2
		Module – 3			
Q.5	a.	Compare mechanical, soft and shape memory polymer based actuators.	10	L1	CO3
	b.	Explain characteristics of sensors and also explain scalar sensing.	10	L2	CO3
		OR			
Q.6	a.	Explain event detection using an offsite remote processing topology with a block diagram.	10	L4	CO3
	b.	Summaries the IoT device design and selection considerations.	10	L3	CO3
		Module – 4			
Q.7	a.	Summaries the advantages of virtualization with respect to end users and CSP.	10	L3	CO4
	b.	Classify virtualization based on the requirement of the users.	10	L1	CO4
		OR			
Q.8	a.	Explain smart irrigation management system.	10	L1	CO4
	b.	Explain advantages of IoT in agriculture.	10	L1	CO4
		Module – 5			
Q.9	a.	Explain components of vehicular IoT with diagram.	10	L2	CO4
	b.	Explain architecture of healthcare IoT.	10	L2	CO4
		OR			
Q.10	a.	Explain advantages of machine learning.	10	L1	CO5
	b.	Explain types of machine learning.	10	L1	CO5

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