CBCS SCHEME

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First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
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.	What is IoT? Write the characteristics of IoT system.	4	L2	CO1
	b.	Explain four broad categories of networks based on reachability.	8	L2	CO1
	c.	Explain with a suitable diagram IoT planes with respect to complex interdependence of technologies.	8	L2	CO2
		OR			
Q.2	a.	Briefly explain various network topologies with suitable diagram.	8	L2	CO2
	b.	With a neat diagram, explain the network communication between two hosts following the OSI model.	7	L2	CO2
	c.	Differentiate between OSI model and TCP/IP model.	5	L2	CO2
		Module – 2			
Q.3	a.	With a block diagram, explain the functional blocks of a typical sensor node in IoT.	10	L2	CO2
	b.	Explain the factors affecting sensorial deviations.	10	L2	CO1
		OR			
Q.4	a.	Explain the desired characteristics of actuators used in IoT.	10	L2	CO3
	b.	Explain any five classes of actuators.	10	L2	CO3
		Module – 3			
Q.5	a.	With neat diagrams, explain two types of offsite processing topologies.	10	L2	CO2
	b.	Explain the three parts of data offloading.	10	L2	CO2
		OR			
Q.6	a.	With a neat diagram, explain onsite processing topology. Give its merit and demerit.	10	L2	CO1
	b.	Explain IoT device selection considerations.	10	L2	CO2

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		Module – 4			
Q.7	a.	What is virtualization? Explain its advantages from end-user and service provider point of view.	10	L2	CO2
	b.	Explain service level agreement and its metrics in cloud computing.	10	L2	CO2
		OR			
Q.8	a.	With a neat diagram, explain architecture of a sensor cloud platform.	10	L2	CO1
	b.	With a diagram, briefly explain the architecture of Leaf Area Index System	10	L2	CO1
		Module – 5			
Q.9	a.	Briefly explain the components of vehicular IoT.	10	L2	CO2
	b.	Explain the layered architecture of AmbuSens.	10	L2	CO2
		OR			
Q.10	a.	With the help of a block diagram, explain the architecture of healthcare IoT.	10	L2	CO2
	b.	Explain the four categories of Machine Learnings.	10	L2	CO2

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