CBCS SCHEME

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BETCK205H/BETCKH205

Second Semester B.E./B.Tech. Degree Examination, June/July 2024
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 the network types based on physical topologies and connection types with schematic diagram.	10	L2	CO1
	b.	With a neat diagram, explain the interdependency technology for IOT planes.	10	L2	CO1
		OR			
Q.2	a.	With neat diagram, explain the network communication between two hosts following OSI model.	10	L2	CO1
	b.	Explain the interdependencies and reach of IoT over various application domains and networking paradigms.	10	L2	CO1
		Module – 2			
Q.3	a.	Outline the basic differences between transducers, sensors and actuators.	6	L2	CO2
	b.	Explain the major factors influence the choice of sensors in IoT based sensing applications.	8	L2	CO2
	c.	Define Sensor and explain the characteristics of sensor.	6	L1	CO1
		OR			
Q.4	a.	Classify the sensor based on : i) Power requirements ii) Sensor output iii) Power to be measured.	10	L2	CO2
	b.	Classify Sensing types on the nature of the environment and the physical sensors.	10	L2	CO2
		Module – 3			
Q.5	a.	Explain IoT device design and selection considerations.	10	L2	CO2
	b.	What are the parameters considered for off loading the data and identify typical data offload locations available in context of IoT.	10	L2	CO2
		OR			
Q.6	a.	Explain event detection using onsite , offsite remote processing topology and collaborative processing technology.	10	L2	CO2
	b.	Classify the data based on how they can be accessed and stored and the importance of processing of IoT.	10	L2	CO2

Module – 4					
Q.7	**a.**	Explain the classification of virtualization based on the requirements of the user.	**6**	**L2**	**CO2**
	b.	Explain different types of cloud model.	**10**	**L2**	**CO1**
	c.	What is SLA and mention its metrics.	**4**	**L2**	**CO2**
OR					
Q.8	**a.**	What are the advantages of virtualization?	**10**	**L2**	**CO1**
	b.	Explain different types of cloud simulators with its features.	**10**	**L2**	**CO1**
Module – 5					
Q.9	**a.**	Explain the different components of health care IoT.	**10**	**L2**	**CO1**
	b.	Explain the architecture and advantages of vehicular IoT.	**10**	**L2**	**CO2**
OR					
Q.10	**a.**	What is Machine Learning? What are the advantages and challenges of Machine Learning?	**10**	**L2**	**CO2**
	b.	What are the advantages and risk of health care IoT?	**10**	**L2**	**CO2**

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