

CBCS SCHEME

USN

BETCK105H/ BETCKH105

First 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.	Describe briefly the various layers and function of OSI model.	10	L2	CO2
	b.	Explain in detail. The classification computer networks with relevant diagrams.	10	L2	CO2
OR					
Q.2	a.	Discuss elaborately the sequence of technical developments toward the emergence of IoT.	10	L1	CO2
	b.	Express how IoT is different from CPS, M2M and WoT. Write briefly.	10	L2	CO2
Module – 2					
Q.3	a.	Outline the difference between transducers, sensors and actuators.	6	L2	CO2
	b.	Outline the simple sensing operation with relevant sketches.	4	L2	CO2
	c.	Explain how sensors are classified based on the parameters.	10	L2	CO2
OR					
Q.4	a.	What are the characteristics of sensor?	5	L2	CO2
	b.	Discuss the various sensorial deviations which are considered as errors in sensors	6	L2	CO2
	c.	What are the various types of actuator? Explain briefly.	9	L2	CO2
Module – 3					
Q.5	a.	Compare the data formats.	5	L2	CO1
	b.	Illustrate with example, the importance of processing in IoT.	5	L2	CO1
	c.	What are the main factors governing the IoT device and selection consideration?	10	L2	CO1
OR					
Q.6	a.	Discuss elaborately with necessary sketch of processing topologies.	12	L2	CO1
	b.	Explain how data offloading is divided, what are the parameters are to be consider, discuss in detail.	8	L2	CO1
Module – 4					
Q.7	a.	Discuss elaborately the key concept of cloud computing and mention the advantages of verbalization.	10	L1	CO2
	b.	What are the types of verbalization.	5	L2	CO2
	c.	Write notes on service model on cloud model.	5	L2	CO2
OR					
Q.8	a.	Explain the various types of cloud simulations. Also mention the advantage of cloud simulation over to a customers.	8	L1	CO2
	b.	Identify the components used on deployment IoT in agricultural field.	8	L2	CO2
	c.	What are the advantages of IoT in agriculture?	4	L2	CO2
Module – 5					
Q.9	a.	Illustrate with case study : crime assistance in a smart IoT transportation system.	10	L2	CO2
	b.	Explain the various components are used to deploy the IoT in vehicular system.	10	L2	CO2
OR					
Q.10	a.	Discuss with relevant sketches, advantages and risk of healthcare IoT deployment model.	10	L2	CO1
	b.	Write a note on types of machine language.	10	L2	CO1