

USN										21CST702
B. E. Degree (Autonomous) Seventh Semester End Examination (SEE), Dec 2024										
Internet of Things										
(Model Question Paper - I)										
[Time: 2 Hours]								[Maximum Marks: 50]		
	<u>Instructions to students:</u> Answer any 5 Full question									
Q. No.		QUESTIONS						Marks	COs	RBT Level
1	A)	Give the formal definition of IoT and Illustrate the generic block diagram of an IoT device						04 M	CO1	L1,L3
	B)	Explain the characteristics of IoT and Determine the IoT level 5 with neat diagram along with example						06 M	CO1	L1,L3
OR										
2	A)	Describe an example of an IoT System in which information and knowledge are inferred from data.						04M	CO1	L1,L3
	B)	Describe the different IoT Communication models.						06 M	CO2	L3
3	A)	Explain in detail M2M system Architecture with neat diagram						04 M	CO2	L3
	B)	Describe the various stages/steps in IoT Design Methodology						06 M	CO4	L4
OR										
4	A)	Difference between M2M and IoT in detail						05 M	CO4	L4
	B)	Describe how SDN can be used for various levels of IoT.						05 M	CO2	L3
5	A)	Explain Domain specific IoT application for Smart Agriculture						05 M	CO2	L3
	B)	Explain Domain specific IoT application for Energy Systems						05 M	CO4	L4
OR										
6	A)	Explain Domain specific IoT application for Environment						05 M	CO2	L3
	B)	Explain Domain specific IoT application for Logistics						05 M	CO4	L4
7	A)	Discuss components like microcontrollers, microprocessors, sensors, actuators, and communication modules that form the foundation of IoT devices.						05 M	CO4	L4
	B)	Explain the role of the Tiva C series microcontroller in IoT and its main characteristics.						05 M	C04	L3
OR										
8	A)	Compare and contrast Raspberry Pi, Arduino, and Tiva boards in terms of their suitability for IoT projects.						05 M	C04	L2
	B)	Discuss the challenges and considerations in selecting IoT boards and sensors for a specific application.						05 M	C04	L2
9	A)	Explain the role of data analytics in IoT and its importance in deriving insights from IoT data.						05 M	C05	L3
	B)	Explain the concept of Hadoop MapReduce and its use in batch data analysis for IoT applications.						05 M	C05	L3
OR										
10	A)	Describe the components of Hadoop, including HDFS and MapReduce, and how they support large-scale data storage and processing.						05 M	C05	L3
	B)	Describe Apache Spark and its advantages over Hadoop MapReduce for real-time data processing in IoT.						05 M	C05	L3