School of Computer Science & Engineering

Back Paper Examination Even Semester (Non - Graduating Batches) – June 2024

[Programme: B.Tech CSE] [Semester: IV] [Batch:]

Course Title: Internet of Things	**Max Marks: 100**
Course Code: E2UC404B / BTCS9211	**Time: 3 Hrs.**

Instructions:	1. *All questions are compulsory.*
	2. *Assume missing data suitably, if any.*

		K Level	COs	Marks
SECTION-A (15 Marks)		5 Marks each		
1.	List the applications of Internet of Things.	K1	CO1	5
2.	Explain the differences between Machines in M2M and Things in IOT?	K2	CO2	5
3.	Identify the role of Data Link Layer & Network Layer Protocols in IOT.	K2	CO3	5
SECTION-B (40 Marks)		10 Marks each		
4.	Illustrate the main components of the IoT architecture and Justify your answer with proper Diagram?	K2	CO2	10
5.	One of the greatest threats to IoT security is the lack of encryption on regular transmissions. Many IoT devices don't encrypt the data they send, which means if someone penetrates the network, they can intercept credentials and other important information transmitted to and from the device. Analyze Internet of Things Security Threats and Attacks.	K4	CO3	10
6.	Examine the role of Raspberry PI and Arduino in Internet of Things application.	K4	CO4	10
7.	Explain functional and operational view specifications for Home Intrusion detection system?	K4	CO4	10
SECTION-C (45 Marks)		15 Marks each		
8.	Describe an example of an IoT system in which information and knowledge are inferred from the data.	K5	CO3	15
9.	Explain how IoT technology used to enable the agricultural industry to increase operational efficiency, lower costs, reduce waste, and improve the quality of their yield.	K5	CO3	15
10	Explain the necessity of adopting IoT technology for a growing need to increase customer loyalty and deliver the best in-store experience by retail sector in the following sectors: (i) Inventory management (ii) Smart payments (iii) Smart vending machines	K6	CO4	15