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PRN. No.	
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PAPER CODE	0114-374 (Backlog)
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DECEMBER 2024 (Backlog) EXAM Sem-I

F.Y. BTECH. (CSE-IoT CSBT)

(PATTERN 2023)

COURSE NAME: BASICS OF IOT

COURSE CODE: CI12234

Time: [2Hr]

[Max. Marks: 60]

(*) Instructions to candidates:

- 1) Use of scientific calculator is allowed
- 2) Use suitable data where ever required
- 3) All questions are compulsory. Solve any **THREE** sub questions from **EACH** question

Que. No.	Question Description	Max. Marks	CO mapped	BT Level
Q1.	Solve any three sub questions from the following			
	A) Differentiate between IoT & Machine to Machine (M2M)	[5]	CO1	L2
	B) With the help of IOT functional block diagram explain IOT.	[5]	CO1	L2
	C) Assess the distinguishing features and properties of the Internet of Things (IoT)	[5]	CO1	L3
	D) Draw labeled pinout diagram of microprocessor and elaborate working of address and data bus	[5]	CO1	L2
Q2.	Solve any three sub questions from the following			
	A) Identify and categorize three real-world scenarios where the microcontroller is currently being utilized to enhance efficiency or improve quality of life	[5]	CO2	L3
	B) Draw labeled architecture of microcontroller	[5]	CO2	L2
	C) Differentiate between Microprocessor & Microcontroller	[5]	CO2	L4
	D) Analyze the evolution of microprocessor	[5]	CO2	L4
Q3.	Solve any three sub questions from the following			
	A) Differentiate between IPv4 & IPv6	[5]	CO3	L3
	B) Apply your understanding of the OSI Reference Model to design a network architecture that ensures efficient communication	[5]	CO3	L3
	C) Explain the process of IPv6 addressing mechanism.	[5]	CO3	L2
	D) Analyze the OSI reference model by illustrating each layer and elucidating their respective functionalities?	[5]	CO3	L4
Q4.	Solve any three sub questions from the following			
	A) Explain the IoT security challenges	[5]	CO4	L2
	B) Evaluate the effectiveness of various authentication methods used in Internet of Things (IoT).	[5]	CO4	L3

	C) Discuss the challenges associated with managing a large number of diverse IoT devices within a network and propose strategies to mitigate associated risks.	[5]	CO4	L4
	D) Explain the IoT security challenges	[5]	CO4	L2

Note: [BT Level – 1. Remember, 2. Understand, 3. Apply, 4. Analyze, 5. Evaluate, 6. Create]