

PRN No.	
---------	--

PAPER CODE	V124-374
---------------	----------

May 2024 (ENDSEM) EXAM

F.Y.B. TECH. (SEMESTER - II)

COURSE NAME: BASICS OF IOT **Branch:** CSE - IoTCSBT **COURSE CODE:** CI12234
(PATTERN 2023)

Time: [1Hr. 30 Min]

[Max. Marks: 40]

(*) Instructions to candidates:

- 1) Figures to the right indicate full marks.
- 2) Use of scientific calculator is allowed
- 3) Use suitable data wherever required
- 4) All questions are compulsory. Solve any one sub question from each Question 1 and 2 and any three sub questions each from Questions 3 and 4.

Q. No.	Question Description	Max. Marks	CO mapped	BT Level
Q.1	a) Assess the distinguishing features and properties of the Internet of Things (IoT),	[5]	CO1	L2
	b) Differentiate between IoT & Machine to Machine (M2M)	[5]	CO1	L2
Q.2	a) Draw labeled architecture of microcontroller	[5]	CO2	L2
	b) 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
Q.3	a) Explain the process of IPv6 addressing mechanism.	[5]	CO3	L2
	b) Apply your understanding of the OSI Reference Model to design a network architecture that ensures efficient communication	[5]	CO3	L3
	c) Analyze the OSI reference model by illustrating each layer and elucidating their respective functionalities?	[5]	CO3	L2
	d) Differentiate between IPv4 & IPv6	[5]	CO3	L3
Q.4	a) 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
	b) Explain the IoT security challenges	[5]	CO4	L2
	c) Elaborate the IoT security best practices	[5]	CO4	L2
	d) Evaluate the effectiveness of various authentication methods used in Internet of Things (IoT).	[5]	CO4	L3

BT LEVEL: 1-Remember, 2-Understand, 3-Apply 4-Analyze 5-Evaluate
6-Creat

