PAPER ID-310940

Roll No:

BTECH
(SEM VII) THEORY EXAMINATION 2023-24
INTERNET OF THINGS

TIME: 3 HRS   M.MARKS: 100

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1.   **Attempt all questions in brief.**

Q no.	Question	Marks	CO
a.	Define IoT.	2	1
b.	What is Data Enrichment?	2	1
c.	Define BeagleBone board.	2	2
d.	Define ARM Cortex.	2	2
e.	What are the roles of network for IoT deployment in various devices?	2	3
f.	Explain CDMA.	2	3
g.	Give 4 names of Arduino library.	2	4
h.	What is an Arduino emulator?	2	4
i.	Explain smart street light system in smart system.	2	5
j.	What is ESP8266?	2	5

SECTION B

2.   **Attempt any three of the following:**

a.	Give 5 examples of hardware sources for IoT Prototype development.	10	1
b.	Write short notes on sensors and actuators with examples.	10	2
c.	Classify MAC Protocol used in sensors network.	10	3
d.	WAP a basic program of Arduino LED Blink.	10	4
e.	Explain development challenges in IoT.	10	5

SECTION C

3.   **Attempt any one part of the following:**

a.	Differentiate between M2M and IoT.	10	1
b.	What are the functions of data consolidation in IoT?	10	1

4.   **Attempt any one part of the following:**

a.	What is RFID? Explain working of RFID.	10	2
b.	Explain the basic concept of Embedded System and explain Raspberry Pi as example.	10	2

5.   **Attempt any one part of the following:**

a.	What is data aggregation? What are the performance measures of data aggregation?	10	3
b.	Explain routing protocols with its type.	10	3

6.   **Attempt any one part of the following:**

a.	Explain the anatomy of Arduino Platform board.	10	4
b.	WAP to check the lowercase and uppercase version of alphabet character using logical operator.	10	4

7.   **Attempt any one part of the following:**

a.	What are the benefits of IoT in e-Health?	10	5
b.	Explain the block diagram of IoT device hardware.	10	5