PAPER ID-311708

Roll No:

BTECH
(SEM I) THEORY EXAMINATION 2023-24
EMERGING TECHNOLOGY FOR ENGINEERING

TIME: 3HRS   **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.	What is the Internet of Things?	2	1
b.	Explain the concept of smart city.	2	1
c.	What is AWS?	2	2
d.	Explain the advantages of cloud computing.	2	2
e.	What are Cryptocurrencies which are readily available in the market?	2	3
f.	Explain the advantages of Blockchain in stock market.	2	3
g.	Explain the types of Drones.	2	4
h.	Explain the concept of 3D printing.	2	4
i.	What is VR?	2	5
j.	Explain the future of communication technologies in India.	2	5

SECTION B

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

a.	What is sensor? Explain their types and features.	10	1
b.	Compare IBM and AWS features of cloud computing technologies.	10	2
c.	What are Smart Contracts? Explain it with neat sketch.	10	3
d.	Explain the history and survey of 3D Printing.	10	4
e.	What is Brain Computer Interfacing? Explain modal and global market.	10	5

SECTION C

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

a.	What is IIoT? Differentiate IIoT and basic IoT on the basis of different parameters.	10	1
b.	What is IoT? Explain the different types of IoT.	10	1

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

a.	What are the vendors/platforms offering cloud computing on demand? Explain those with their attributes.	10	2
b.	What are the major attributes of cloud computing? Explain it's nature and benefits.	10	2

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

a.	What are the principles and technologies of Blockchain? Explain with suitable examples.	10	3
b.	What is Blockchain? Explain their applications in diversified applications.	10	3

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

a.	What are design principles and tools for making 3D printing? Explain with neat block diagrams.	10	4
b.	Explain different regulations for making a drone pilot. What are their general steps?	10	4

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

a.	Differentiate Augmented Reality (AR) and Virtual Reality (VR).	10	5
b.	What is EEG? Is EEG similar to BCI? Comment on it.	10	5