PAPER ID-310963

Roll No:

BTECH
(SEM VII) THEORY EXAMINATION 2023-24
IOT SYSTEM ARCHITECTURE

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.   2 x 10 = 20

Q no.	Question	Marks	CO
a.	Define IoT and its applications.	2	1
b.	Explain the use of Internet in IoT.	2	1
c.	Discuss the process of Power consumption in IoT.	2	2
d.	Define chip size in IoT.	2	2
e.	Discuss version industry 4.0 in IoT.	2	3
f.	How industry various factors affect the working of IoT?	2	3
g.	List the security feature of IoT.	2	4
h.	Explain the Monitoring process importance in IoT.	2	4
i.	Write the short notes on Testing in IoT.	2	5
j.	List the factors affect the Testing process in IoT.	2	5

SECTION B

2.   Attempt any *three* of the following:

a.	Explain the various protocols used on the Internet of Things with example.	10	1
b.	Describe the use of IoT Network Model in System analysis process.	10	2
c.	Illustrate the Industrial Internet of Things and its architecture with proper diagram.	10	3
d.	Explain the Application process of Security and Safety in Internet of Things Network.	10	4
e.	Discuss the Modbus protocol in the Security testing of Internet of Things.	10	5

SECTION C

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

a.	Draw the IoT System Architecture and discuss its working in detail.	10	1
b.	Explain the Security issues of Internet of Things Platform.	10	1

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

a.	Define Duty Cycle. Explain the concept of IoT Device Design Space with example.	10	2
b.	Discuss the concept of Event Transport and Migration in Internet of Things.	10	2

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

a.	Write about the basic Technologies used in the industry internet of Things.	10	3
b.	Illustrate the various challenges to implement the Industry Internet of Things.	10	3

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

a.	Define Wireless Network. Write the challenges faced in the security of IoT Network.	10	4
b.	Explain the concept of Reliable and Secure by Design in IoT.	10	4

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

a.	Describe the Fuzzing Industrial Control Network Systems on the Internet of Things with an example.	10	5
b.	Explain the Fuzz testing type for security in Internet of Things and its challenges.	10	5