



R18 Regulation

Subject code: 2E7EI

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech VII Semester Supplementary Examinations, November 2023

INTERNET OF THINGS (Computer Science and Engineering)

Maximum Marks: 70

Date:06.12.2023 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

1	Define IOT.	L1
2	List out the interfaces used in IoT?	L1
3	What is the importance of the Internet of Everything?	L1
4	Name the Need For sensors in IoT.	L1
5	Define Software defined Network	L1
6	List out the key elements of NFV architecture	L1
7	Define Arduino	L1
8	List out the four V's in Big Data?	L1
9	List out various versions of raspberry pi devices till date	L1
10	What is the use of SPI and I2C interfaces on raspberry pi?	L1

Part-B

Answer All the following questions.

(5X10M=50Marks)

11	a) With the help of neat diagrams, describe the levels of IOT with an example each. [5] b) Describe various functional blocks of IOT. [5]	L1 L2
OR		
12	a) Explain different application layer protocols for the IoT. [5] b) Describe various functional blocks of IoT. [5]	L2 L2
13	Explain how IOT Technology used to enable the agricultural industry to increase. Operational Efficiency, lower costs, reduces waste, and improve the quality of their Yield. [10]	L2
OR		
14	a) What is relation between WSN and IoT. Explain with example. [5] b) Explain layered architecture of IoT. [5]	L1 L2
15	a) Describe how NFV can be used for virtualizing IoT device. [5] b) Describe how SDN can be used for various levels of IoT. [5]	L2 L2
OR		

16	a) What is role of Cloud Computing and Big Data in Internet of Things. [5] b) Explain IoT Application and Deployment Scenarios in different domains. [5]	L1 L2
17	a) Discuss in detail about Arduino with neat sketch. [5] b) Explain the concepts involved in Raspberry Pi. [5]	L2 L2
	OR	
18	a) Design an automatic refrigerator light system with LED, switch & raspberry pi and write a python program to support the working of that design. [5] b) List available models in Raspberry Pi. [5]	L2 L1
19	a) Define Information model and controller service for smart parking IoT system. [5] b) Design a weather monitoring IoT system using WebSocket based? [5]	L1 L2
	OR	
20	a) What is the Difference between a Xively data stream and a channel? [5] b) Describe the architecture of Django Application. [5]	L1 L2