



R22 Regulation

Subject code:4P5HE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, May 2025

INTERNET OF THINGS

(CSE(DS))

Maximum Marks: 60

Date: 27.06.2025

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.
 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 (10X1M=10 Marks)		Marks	CO	BTL
1	Give the classical definition of IoT.	1M	1	L1
2	Draw the generic block diagram of IoT Device.	1M	1	L1
3	What is Network function Virtualization?	1M	2	L1
4	Define SDN.	1M	2	L1
5	What is the primary purpose of Iot identification protocols?	1M	3	L1
6	What is IPv6?	1M	3	L1
7	What accessories do you need for Raspberry PI?	1M	4	L1
8	Define Xively cloud.	1M	4	L1
9	List advantages of using WAMP in IoT.	1M	5	L1
10	List Cloud Storage Models.	1M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain Communication Models in detail.	10M	1	L2
OR				
12	Explain IoT Functional Blocks with suitable diagram.	10M	1	L2
13	What is Software-Defined Networking (SDN), and how does it address the challenges faced in managing IoT networks?	10M	2	L2
OR				
14	Explain the IOT system management with NETCONF-YANG.	10M	2	L2
15	How does RFID technology facilitate object identification and tracking in IoT systems, and what are the privacy concerns associated with its widespread use?	10M	3	L2
OR				
16	How does the IEEE 802.15.4 standard support low-power, low-data-rate communication in IoT networks, and what are its limitations in high-density IoT environments?	10M	3	L2

17	Write a note on Arduino IDE.	10M	4	L2
	OR			
18	Draw and explain the architecture of RASPBERRY.	10M	4	L2
19	How to use a service platform while developing IoT applications. Explain with respect to Xively cloud service.	10M	5	L2
	OR			
20	Write about Web Application Messaging Protocol.	10M	5	L2