



R22 Regulation

Subject code: 4P6GC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Regular Examinations, May 2025

INTERNET OF THINGS

(CSE(AIML))

Maximum Marks: 60

Date:25.06.2025

Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 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	Bloom Tx
1.a)	Define actuator.	1M	CO1	L1
b)	List out the applications of IoT?	1M	CO1	L1
c)	What is the main difference between IoT and M2M?	1M	CO2	L1
d)	Outline the network operator requirements?	1M	CO2	L2
e)	What is the functionality of 6LoWPAN?	1M	CO3	L1
f)	Summarize the components of a sensor node?	1M	CO3	L2
g)	Name any two features of Arduino?	1M	CO4	L1
h)	What is the difference between Arduino and Raspberry?	1M	CO4	L1
i)	List out the cloud storage models?	1M	CO5	L1
j)	What is the need of IoT physical server?	1M	CO5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	a. Describe the characteristics of IoT.	5M	CO1	L1
	b. Outline the basic differences between transducers, sensors, and actuators.	5M	CO1	L2
OR				
3	Illustrate briefly physical design of IoT?	10M	CO1	L2
4	With the help of neat diagrams, explain the M2M system architecture?	10M	CO2	L2
OR				
5	Draw the structure of software defined networking for IoT & Explain it?	10M	CO2	L3
6	Describe how wireless sensor networks became one of the enabling technologies of IoT.	10M	CO3	L2
OR				
7	List out the connectivity technologies and explain any two connectivity technologies with neat diagram?	10M	CO3	L3
8	Explain the concept of Arduino function libraries?	10M	CO4	L4
OR				

9	Write an Arduino 'C' program and draw the circuit diagram, to alert the temperature using DHT on Arduino board?	10M	CO4	L3
10	Explain the communication APIs with net diagrams?	10M	CO5	L3
	OR			
11	List out the Amazon Web Services(AWS) for IoT and explain any two AWS?	10M	CO5	L3