R22 Regulation *Subject code: 4P6EE*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B. Tech VI Semester Supplementary Examinations, November 2025

INTERNET OF THINGS

(CSE)

Maximum Marks: 60 Date:15.11.2025 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)	Which technology is commonly used to enable communication in IoT devices?	1M	CO1	1
b)	Give one example of a domain-specific IoT application.	1M	CO1	1
c)	What does M2M stand for in the context of communication technologies?	1M	CO2	1
d)	List the function of NETCONF in IoT systems?	1M	CO2	2
e)	Point out any one built-in data type in Python.	1M	CO3	1
f)	What keyword is used to define a class in Python?	1M	CO3	1
g)	What is the operating system commonly used on Raspberry Pi?	1M	CO4	1
h)	Which Python web framework is used to build RESTful web APIs for IoT applications?	1M	CO4	1
i)	Show one device commonly used in IoT-based home automation systems.	1M	CO5	1
j)	Which sensor is typically used for detecting temperature in weather monitoring systems?	1M	CO5	1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	a) Define the Internet of Things (IoT) and elaborate on its key characteristics. b) Explain in detail about IOT protocols.	5M 5M	CO1	2
	OR			
3	Explain briefly on Logical design of IOT. Illustrate with diagram.	10M	CO1	2
4	a) Compare and contrast IoT with M2M. b) Discuss on M2M applications and benefits in modern networks.	5M 5M	CO2	4
	OR			
5	Elucidate the importance of IoT system management.	10M	CO2	2
6	a) How is function overriding implemented in python? b) Explain how functions are defined and used, and describe their importance in structuring code for complex IoT systems.	5M 5M	CO3	2

	OR			
7	Explain the difference between a python module and a package with an example.	10M	CO3	2
8	Explain the role of Raspberry Pi in IoT applications.	10M	CO4	2
	OR			
9	Elaborate briefly on basic building blocks of IOT device.	10M	CO4	2
10	Describe the architecture of Django application with a neat diagram.	10M	CO5	2
	OR			
11	Demonstrate on cloud storage API with an example.	10M	CO5	2

14