



Regulation R20

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

Subject code:3E7FF

B.Tech VII Semester Supplementary Examinations, April 2024

INTERNET of THINGS

(Information Technology)

Maximum Marks: 70

Date:23.04.2024 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. Total 10 questions it consists.
4. Part-B 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 State the characteristics of IoT.
- 2 What is a smart home?
- 3 What is the importance of the Internet of Things?
- 4 What are the elements of Home Automation System?
- 5 Define Software defined Network (SDN)?
- 6 What is the difference between M2M and IoT?
- 7 Define Arduino
- 8 Define Micro Python
- 9 How to interface a switch to raspberry pi?
- 10 What is the use of GPIO pins in a IoT device?

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. [5M]
b) Describe various functional blocks of IOT. [5M]
- OR
- 12 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. [10M]
- 13 Explain in detail about SDN Architecture? [10M]
- OR
- 14 Explain NETCONF and YANG? [10M]
- 15 Describe how NFV can be used for virtualizing IoT device. [10M]
- OR
- 16 Describe how SDN can be used for various levels of IoT. [10M]

- 17 a) Discuss in detail about Arduino with neat sketch. [5M]
b) Explain the concepts involved in Raspberry Pi. [5M]
OR
- 18 What is the use of SPI and I2C interfaces on raspberry pi? [10M]
- 19 a) What is the function of URL patterns in Django. [5M]
b) Describe the architecture of Django Application. [5M]
OR
- 20 Describe the architecture of Amazon Web Service for Iot. [10M]