R17 Regulation *Subject code:* 1E7ED

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech IV Year I Semester Regular Examinations, February 2021

Internet of Things

(Computer Science and Engineering)

Maximum Marks: 70 Date: 02.03.2021 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 **(10x2M=20 Marks)**

1 List out the parts of Physical design of IoT.
2 Describe the needs for Communication APIs in IOT.
3 Analyse which access technology is preferable for IOT, SDN or NFV?
4 Define the requirements of Network Operator in IoT.
5 Define Structured Data in IOT?
6 Define two important point about Python programming.
7 Assess the role Raspberry Pi and role of IOT in education.
8 Distinguish between IoT Physical devices and Endpoints.
9 Discuss cloud storage models & WAMP.
10 Define Smart traffic management system using IOT.

Part-B

Answer All the following questions. **(10M X 5=50Marks)**

11 Construct the IoT Logical design architecture with core functional stack. (10M)

OR

12 Categorize Sensors and list out the IoT enabling technologies with examples. (10M)
13 Construct NETCONF-YANG based network Architecture for Systems management of IoT. (10M)

OR

14 Discuss the Pros and cons of M2M and IoT. (10M)
15 Choose and describe an example for IoT Design Methodology? (10M)

OR

16 Appraise python packages of interest for IoT.(10M)
17 Explain the detailed features of IoT devices, Board and Interfaces. (10M)

OR

18 Discuss about programming for Raspberry-Pi with Linux and Python. (10M)
19 Define python web application framework – Django and Xively cloud. (10M)

OR

20 Construct the architecture of Smart Parking & smart traffic management system in IOT. (10M)