R17 Regulation *Subject code:* 1E7EC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

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

MOBILE COMPUTING

(Computer Science and Engineering)

Maximum Marks: 70 Date: 27.02.2021 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 Point out the features of 2.5 G communication technology.
2 Explain in what ways is GPRS better than GSM?
3 Compose a role which is played by MAC protocols in Mobile computing.
4 What is meant by DHCP? Why does an IP conflict occurs?
5 Define the TCP issues in Mobile IP networks.
6 Examine the use of snoop protocol in TCP.
7 List out the classifications of Data-Delivery Mechanisms
8 What is the use of Temporal Addressing in Selective Tuning?
9 Classify different types of MANET Routing Protocols.
10 Analyze WAP using a Client – Server diagram.

Part-B

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

11 Describe the GSM architecture in detail.(10M)

OR

12 (a) Explain GPRS transmission plane protocol reference model. (6M)
(b) Explain GPRS services. (4M)

13 Compare and contrast SDMA, TDMA, FDMA and CDMA schemes.(10M)

OR

14 Demonstrate the operation of DHCP with a neat diagram and explain its protocol architecture.(10M)

15 (a) Discuss in detail about Mobile TCP. (6M)
(b) Summarize the TCP approaches used in Mobile Networks.(4M)

OR

16 Explain in detail about Data Recovery Process and QoS Issues. (10M)

17 Discuss in detail about Selective Tuning and Indexing methods. (10M)

OR

18 Explain in detail about the protocol models for data synchronization. (10M)

19 Analyze the working of DSR and DSDV in detail. (10M)

OR

20 (a) Illustrate the use of WAP in Mobile networks. (6M)
(b) Show the architecture of WAP and its working. (4M)