R18 Regulation *Subject code:* 2E7EC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, July 2022

MOBILE COMPUTING

(Computer Science and Engineering)

Maximum Marks: 70 Date:02.07.2022 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 which carries 10M.
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 Distinguish Mobile Computing vs. Wireless Networking
2 Why "MAC protocol designed for infrastructure based wireless network may not work satisfactory in infrastructure less environment"?
3 What are the logical channels in GSM?
4 Identify Modules in GSM Architecture?
5 Discuss the three steps used in DSDV for the reconfiguration of path used for ongoing data transfer.
6 What is DHCP?
7 What are the layers of TCP/IP protocol stack?
8 What is WML?
9 List any two Mobile payment Systems?
10 List any four Mobile Operating Systems?

Part-B

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

11 Summarize the applications of Mobile computing. (10)

OR

12 Compare and contrast SDMA, TDMA, FDMA and CDMA schemes. (10)
13 (A) What are the functions of authentication and encryption in GSM? (5)
(B) How a GSM network provides security to the customers? (5)

OR

14 (A) Explain GPRS Architecture with diagram (7)
(B) Explain UMTS? (3)
15 (A) Explain the multicast protocols for MANET in detail. (5)
(B) Analyze features of multicast routing protocols for MANET. (5)

OR

16 (A) Discover the requirements of Mobile IP. (5)
(B) Show how Tunnelling and encapsulation play a crucial role in packet delivery through routing. (5)
17 (A) Discuss in detail about Mobile TCP. (5)
(B) Summarize the TCP approaches used in Mobile Networks. (5)

OR

18 (A) Illustrate the use of WAP in Mobile networks. (5)
(B) Show the architecture of WAP and its working. (5)

19 (A) Explain mobile OS constrains & requirements. (5)
(B) Explain about Android OS. (5)

OR

20 (A) Explain M-Commerce Structure. (5)
(B) Explain Mobile Payment Systems? (5)