Regulation R17 *Subject code:* **1E6FA**

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Year II Semester Supplementary Examinations, January 2023

MOBILE COMPUTING

(IT)

Maximum Marks: 70 19/01/2023 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 Define Handover in GSM.
2 Explain tele services in GSM briefly.
3 What are the Requirements for implementing Mobile IP.
4 Define Encapsulation. What are the types of Encapsulation?
5 Define Snooping TCP.
6 What are the advantages and disadvantages of Indirect TCP?
7 Define 3-tier client-server architecture.
8 Define Data Caching. Write short notes on it.
9 List out the properties of MANET.
10 Define J2ME.

Part-B

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

11 a) Demonstrate GSM protocols in detail. 5
b) Discuss about Novel Applications of Mobile Computing. 5

OR

12 Explain the concept of Localization and Calling in GSM. 10

13 a) Explain SDMA technique with neat diagram. 5
b) Explain Generic Routing Encapsulation with packet format. 5

OR

14 Explain the following Medium Access Control Mechanisms
i) Exposed and Hidden Terminals 5 ii) Near and Far Terminals. 5

15 Explain Mobile TCP with its advantages and disadvantages. 10

OR

16 a) Explain Transmission/Time-out Freezing in detail. 5
b) Demonstrate congestion control in TCP. 5

17 Discuss about Transaction models and Query processing in Database. 10

OR

18 a)Explain Pull Based mechanism with its advantages and disadvantages. 5
b)Illustrate communications Asymmetry in detail. 5

19 a) Explain the Security in MANET'S. 5
b) Explain Dynamic Source Routing Protocol. 5

OR

20 Demonstrate J2ME with layer stack in detail 10