



**B.Tech VII Semester Supplementary Examinations, July 2022**

**MOBILE COMPUTING**  
(Information Technology)

Maximum Marks: 70

Date:04.07.2022 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 Tabulate the generations of mobile communication technologies.
- 2 Point out the issues of MAC Protocol.
- 3 Show the connection establishment in GSM.
- 4 Classify the functions of HLR and VLR.
- 5 How to Create a Network Multicasting?
- 6 List the disadvantages of DSDV.
- 7 Define the TCP issues in Mobile IP networks.
- 8 Define congestion.
- 9 Give four examples of Mobile OS.
- 10 What is microkernel operating system?

Part-B

Answer All the following questions.

(10MX 5=50Marks)

- 11 Demonstrate the working principle of  
(A) FDMA scheme. (5)  
(B) SDMA scheme. (5)
- 12 Discuss: OR  
(A) Hidden terminal and Exposed terminal problem. (5)  
(B) Far and Near Terminal problem. (5)
- 13 Explain GPRS Architecture in detail (10)
- 14 Analyze the interfaces and signaling used in GSM Network and UMTS network (10)
- 15 Explain about indirect TCP in detail. (10)
- 16 Explain about hoarding and caching techniques in detail. (10)

17 Explain about data delivery mechanisms in details. [10]

OR

18 Explain about data synchronization. [10]

19 Illustrate the use of WAP in Mobile networks and show the architecture of WAP and its working. (10)

OR

20 (A) Draw the architecture of WSP Session establishment, Suspension, resume, termination. (5)

(B) Explain in detail WSP as connectionless session service. (5)