

PRAGATI ENGINEERING COLLEGE: SURAMPALEM
(AUTONOMOUS)
M.Tech II Semester Regular/Supplementary Examinations, July – 2024

MOBILE COMPUTING
(CSE)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry EQUAL marks

5X12=60

Q.NO.	Question	BTL	CO	Marks
1.	a. Describe the Components of the GSM Architecture	K2	CO1	6M
	b. What is the difference between mobile communications and mobile computing? Explain each term briefly.	K2	CO1	6M
2.	Describe the four primary multiple access techniques: SDMA, FDMA, TDMA, and CDMA. Summarize the main principles of each technique and give an example of a real-world application for each.	K3	CO2	12M
3	a. What is route optimization in Mobile IP? Why is it important for enhancing the performance of mobile communications?	K2	CO3	6M
	b. Define Mobile IP. What are its primary goals in supporting mobile devices in a network?	K2	CO3	6M
4	a. What is Mobile TCP (M-TCP), and how does it differ from conventional TCP? Discuss its mechanisms for managing mobile node mobility.	K2	CO4	6M
	b. Describe the data recovery process in databases. What methods are typically employed to ensure data integrity and consistency after a failure?	K2	CO4	6M
5.	a. Compare and contrast different classifications of data delivery mechanisms in distributed systems. In what scenarios would each mechanism be most effective, and what are their advantages and disadvantages?	K3	CO5	6M
	b. Analyze the Dynamic Source Routing (DSR) protocol in terms of its mechanisms for route discovery and maintenance. How does DSR manage routing information, and what are its strengths and weaknesses in a mobile ad hoc environment?	K3	CO5	6M
6.	a. Explain in detail about GPRS Architecture.	K2	CO1	6M
	b. Write short notes on SDMA, FDMA, TDMA, CDMA	K2	CO2	6M
7	a. Describe the process of location management in Mobile IP. How does it help in tracking a mobile node's whereabouts?	K2	CO3	6M
	b. What are the main features of conventional TCP and how do they support reliable data transmission in standard IP networks?	K2	CO4	6M
8	a. Discuss the importance of client-server computing in database management systems. How does client-server architecture facilitate data access and processing?	K2	CO4	6M
	b. Evaluate the applications of Mobile Ad hoc Networks (MANETs) in various fields such as military, disaster recovery, and smart cities.	K3	CO5	6M