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Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam – 603 110

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Computer Science and Engineering

Continuous Assessment Test – II

Question Paper

Degree & Branch	B.E & Computer Science and Engineering				Semester	VII
Subject Code & Name	UCS1702 Mobile Computing				Regulation:	2018
Academic Year	2022-23 ODD	Batch	2019-23	Date	15.10.2022	FN
Time: 8.15 am to 9.45 am	Answer All Questions				Maximum: 50 Marks	

Part – A (6×2 = 12 Marks)

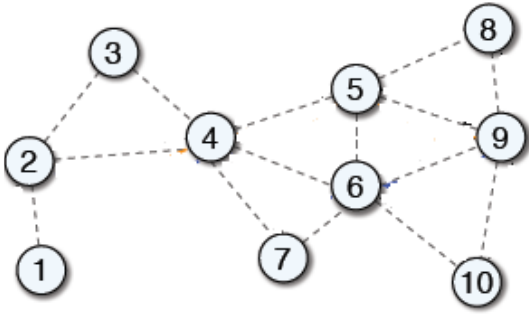
KL2	1. Explain the functions of AuC.	CO4
KL2	2. Summarize the limitations of GSM.	CO4
KL2	3. Explain the reasons for handover in GSM.	CO4
KL2	4. Illustrate the steps in Mobile originated call	CO4
KL3	5. With the help of handover margin describe handover in GSM?	CO4
KL3	6. Identify the limitations of Indirect TCP and snooping TCP.	CO3

Part – B (3×6 = 18 Marks)

KL4	7. Analyse on how I-TCP isolates problems on the wireless link. List the main drawbacks of this solution.	CO3
KL3	8. Identify the operations of the different TCP congestion control algorithms for wired networks.	CO3
KL2	9. Illustrate the mobile services offered by GSM with a neat diagram.	CO4

Part – C (2×10 = 20 Marks)

KL3	10. Identify a routing protocol which exhibits both proactive and reactive approaches. Explain the protocol with a concrete example.	CO2
(OR)		
KL3	11. Consider the following scenario of mobile nodes whose zone radius is 2:	CO2

	 <p>a. Node 3 is the sender and node 9 is the receiver. Analyze the scenario and discover the path from 3 to 9. While discovering the path, examine what happens inside and outside the zone. (5 marks)</p> <p>b. Now assume that node 3 is sender and nodes 5,6, 8 are receivers of a group communication. Explain why the mobile routing protocol of the previous answer is not suitable. Suggest a more appropriate protocol, describing its principles and advantages in this scenario. (5 marks)</p>	
KL3	12. Identify the system used in 2G cellular telecommunication. With a neat diagram, explain its architecture.	CO4
(OR)		
KL3	13. Consider the following scenario: “A person makes a call from his landline to his friend who uses a mobile phone”. Identify the call type of the GSM and explain with a neat diagram.	CO4

Prepared By	Reviewed By	Approved By
Course Coordinator	PAC Team	HOD