

Reg. No.																			
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code	12274
---------------------	-------

**B.E./B.Tech - DEGREE EXAMINATIONS, NOV/DEC 2023**  
Sixth Semester  
**Computer Science and Engineering**  
(Common to Information Technology)  
**CS8601 – MOBILE COMPUTING**  
(Regulations 2017)

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**  
Answer ALL Questions

	<i>Marks, K-Level,CO</i>
1. Define Mobile computing.	2,K1,CO1
2. What are the different random assignment schemes in MAC?	2,K1,CO1
3. List the three important features of GSM security features.	2,K1,CO2
4. What are the major functions of RSS?	2,K1,CO2
5. Differentiate between Tunneling and Reverse Tunneling.	2,K1,CO3
6. List the uses of BOOTP protocol.	2,K1,CO3
7. What are the attacks at various layers of MANET protocol?	2,K1,CO4
8. Why traditional routing strategies cannot be deployed in a MANET?	2,K1,CO4
9. Name the classes of wireless transaction protocol.	2,K1,CO5
10. Define Wireless Application Environment.	2,K1,CO5

**PART - B (5 × 13 = 65 Marks)**  
Answer ALL Questions

11. a) Explain the working principle of FHSS and DSSS. How spread spectrum useful for mobile computing?	13,K2,CO1
<b>OR</b>	
b) Describe in detail about the Random assignment schemes that are used in CDMA protocol.	13,K2,CO1
12. a) Describe the GSM architecture and its services with a neat diagram.	13,K2,CO2
<b>OR</b>	
b) Explain the distinguishing features of various generations of wireless cellular networks.	13,K2,CO2
13. a) With a neat diagram, explain DHCP and its protocol architecture.	13,K2,CO3

**OR**

- b) With a neat diagram explain how packet delivery to and from a mobile node is transferred in mobile IP. *13,K2,CO3*
14. a) (i) Draw and explain the architecture of VANET. *8,K2,CO4*  
(ii) Explain how does it differ from MANET. *5,K2,CO4*

**OR**

- b) Discuss how multicast routing is carried out in ad-hoc networks. *13,K2,CO4*
15. a) What are Snooping TCP and Mobile TCP? Explain their functionalities in the mobile environment with a neat diagram. *13,K2,CO5*

**OR**

- b) Explain Wireless Transaction protocol and WDP in detail. *13,K2,CO5*

**PART - C (1 × 15 = 15 Marks)**

16. a) Explain with neat diagram the structure of M-Commerce and discuss about its applications. *15,K2,CO6*

**OR**

- b) What do you understand by the Mobile payment system? Briefly explain an application where mobile payment may be useful. Explain the different payment systems that are available. *15,K2,CO6*