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Elective-II : Mobile Computing

P. Pages : 2

Time : Three Hours

**NIR/KW/18/3578**

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.

1. a) What are the various applications of mobile communication. 7
b) Draw a simplified reference model of wireless communication and explain its working. 7

OR

2. a) What are the benefits? Advantages of wireless network over wired network. 6
b) What do you mean by term antennas? Explain in detail, different types of antennas and their uses. 8
3. a) Explain near and far terminal effects and discuss the scenario with suitable diagrams. 6
b) What is the problem of hidden & exposed terminals? Explain in detail. 7

OR

4. a) Compare SDMA, FDMA, TDMA, CDMA. 6
b) What are the advantages & disadvantages of cellular system having small cell. 7
5. What do you mean by GSM? Explain GSM Architecture in detail. 14

OR

6. Explain the following terms : **any three**. 14
 - a) Echo Cancellor.
 - b) Protocols (GSM).
 - c) Handover in GSM.
 - d) Cell layout and frequency planning.
 - e) AGC & EIR.

7. a) Explain the state diagram for Dynamic Host configuration Protocol. 7
b) What is mobile IP? How mobile IP is useful in mobile communication. 6

OR

8. a) Explain traditional TCP in detail. 6
b) Explain selective re-transmission and transaction oriented TCP. 7
9. a) What do you mean by mobile Adhoc networks? Explain its application in detail. 7
b) Explain any one of routing protocol in MANET. 6

OR

10. a) Explain Dynamic Source Routing (DSR) Protocol. 6
b) Explain security in MANET (Warm hole attack). 7
11. a) Explain the WAP 1.X architecture. 7
b) Explain the working of wireless transaction protocol in WAP. 6

OR

12. a) Explain the concept of Bluetooth protocol stack with suitable diagram. 8
b) Explain in detail wireless LAN. 5



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High expectations are the key to everything.

~ Sam Walton

