

Elective - II : Mobile Computing

P. Pages : 2

Time : Three Hours



KNT/KW/16/7494

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.
 8. Due credit will be given to neatness.
 9. Assume suitable data whenever necessary.
 10. Illustrate your answers whenever necessary with the help of neat sketches.
 11. Use of non programmable calculator is permitted.

1. a) With the help of neat diagram, explain the layout model of wireless communication. **7**
b) What are the benefits/advantages of wireless network over wired network. **6**
OR
2. a) What do you mean by term Antennas? Explain in detail, different types of Antennas & their uses. **8**
b) What are different applications of wireless communication. Discuss with their categories. **5**
3. a) What is the problem of Hidden & exposed terminals? Explain in detail & discuss its solution also. **8**
b) Explain space & frequency division multiplexing with detail diagram & examples. **5**
OR
4. a) What are the effects of Near & far terminals explain with suitable diagram. **5**
b) Compare TDMA with CDMA & Also explain why TDMA cannot be used Alone with FDMA. **8**
5. What do you mean by GSM? Explain GSM Architecture in detail. **14**
OR
6. Explain the following terms: **any three.** **14**
 - a) Echo canceller **5**
 - b) Protocols (GSM) **4**
 - c) Handover **4**
 - d) Cell layout & frequency planning. **4**
 - e) AuC & EIR

7. a) Differentiate between traditional TCP & indirect TCP with diagram. 7
b) Explain the state diagram for Dynamic Host configuration protocol. 7

OR

8. Explain the following Scenarios **any three** 14
a) Selective Re-Transmission
b) Translation Oriented TCP
c) Fast Re-transmission/fast recovery
d) Snooping TCP
e) Transmission time out/freezing.

9. a) What do you mean by mobile Ad Hoc networks? Explain its properties in detail. 8
b) Explain AODV in detail. 5

OR

10. a) What are the security issues are there in MANET? Explain confidentiality authentication integration & Non- repudiation in detail. 9
b) Explain in brief DSR. 4

11. What do you mean by wireless application protocol? Explain its layered stack in detail. 13

12. a) What is the purpose of Bluetooth technology explain its architecture in detail. 9
b) Explain Wireless LAN. 4
