

B.E. (Computer Engineering) Eighth Semester (C.B.S.)  
**Elective-III : Wireless communication & Mobile Computing**

P. Pages : 2

Time : Three Hours



**NRT/KS/19/3712**

Max. Marks : 80

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- 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 and adequate dimensions.
  9. Assume suitable data whenever necessary.
  10. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Describe the system design for cellular communication. 7
- b) Define the term : 6
- i) Handoff
  - ii) Frequency reuse
  - iii) Channel assignment.

**OR**

2. a) State the objectives of wireless communication. 7
- b) Write short note on sectoring and cell splitting. 6
3. a) Write short note on Wimax technology. 6
- b) Explain GSM architecture & signaling interface for OMC & VLR. 7

**OR**

4. a) Describe in detail sensor networks. 6
- b) Write short note on CDMA technology. 7
5. a) What are the benefits of location information for routing in adhoc network. 7
- b) Describe in detail mobile peer-peer technology. 7

**OR**

6. a) Explain DSR routing protocol for mobile network. 7
- b) Explain the concept of location tided routing. 7

7. a) Write note on mobile adhoc network. **5**  
b) Differentiate between Indirect-TCP, Snooping TCP and mobile TCP. **8**

**OR**

8. a) Explain Tunneling and Encapsulation. **7**  
b) Write short note on : **6**  
i) Mobile IP  
ii) Dynamic Host Configuration Protocol.

9. a) Describe in detail power management technique for Network & data link layer. **7**  
b) Explain in detail VOIP. **6**

**OR**

10. a) Discuss about security issues in mobile network. **6**  
b) Write short note on **7**  
Session Initiation Protocol (SIP)  
11. a) Draw and explain WAP architecture. **7**  
b) Explain logical link control and adaptation protocol (I2 CAP) **7**

**OR**

12. a) Write short note : **14**  
i) Link Management and I2ME  
ii) MAC layer  
iii) Bluetooth Security.  
iv) Network Security.

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