M.E. Second Semester (Computer Science & Information Technology) (New-CGS)
13194 : Elective-II : Mobile Computing : 2 RNME 5

P. Pages : 2

Time : Three Hours

AW - 3882

Max. Marks : 80

1110

Notes : 1. Due credit will be given to neatness and adequate dimensions.
2. Assume suitable data wherever necessary.
3. Illustrate your answer necessary with the help of neat sketches.
4. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) What is Doppler effect? How can you compensate for the impact of Doppler effect in cellular system? 7

   b) Explain slow fading and fast fading in wireless channel. 7

OR

2. a) What are the applications of a satellite system? 7

   b) Discuss the challenges of wireless networking. 7

3. a) Explain co-channel interference mathematically. What are the techniques to reduce cochannel interference. 7

   b) Explain signal strength and cell parameters in detail. 6

OR

4. a) Write short note on frequency reuse and hexagonal cell pattern. 7

   b) Describe the following terms: 6
   i)   Delay Spread   ii)   Coherence Bandwidth

5. a) Explain AMPS operation in detail. 7

   b) Write short notes on FSM and IMT-2000. 6

OR

6. a) Describe relationship between IS-41 & DSI Protocol stack using suitable diagram. 7

   b) How do you differentiate between privacy & security? 6

7. a) What do you mean by routing in mobile adhoc network? Explain dynamic source routing with neat diagram. 7

   b) Discuss any two route optimization strategies. 7

OR

8. a) Explain the characteristics of MANET.   7

   b) Explain advantages & disadvantages of wireless sensor networks over wired sensor networks.   7

9. a) Explain ultra-wide band technology with its two methods to generate wide spectra.   7

   b) Write short notes on: 6

     i) Wireless metropolitan Area N/W

     ii) Wireless Local Area N/W (WLANs).

OR

10. a) Explain the design of MAC management in IEEE 802.11 Protocol.   7

   b) What is topology? Explain wireless personal area networks in detail.   6

11. a) What are the security threats to wireless network?   7

   b) Draw the Bluetooth protocol stack and explain the core protocol.   6

OR

12. Describe the types of Antenna. Explain smart antenna & space division multiplexing access.   13

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