

AQ-2904

Faculty of Engineering & Technology

M.E. Computer Science & Infor. Tech. Semester—II (New-C.G.S.) Examination

MOBILE COMPUTING

(Elective—II)

Paper—2 RNME 5

Time : Three Hours]

[Maximum Marks : 80

INSTRUCTIONS TO CANDIDATES

- (1) All questions carry marks as indicated.
 - (2) Due credit will be given to neatness and adequate dimensions.
 - (3) Assume suitable data wherever necessary.
 - (4) Illustrate your answers wherever necessary with the help of neat sketches.
 - (5) Use pen of Blue/Black ink/refill only for writing the answer book.
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1. (a) Explain in detail the slow fading and fast fading effect in wireless channel. 7
 - (b) What is Protocol ? Explain network protocols in detail. 7
- OR**
2. (a) What are the applications of a satellite system ? 2
 - (b) Explain the characteristics of cellular system. 7
 - (c) Describe in detail the Radio Propagation. 5
3. (a) Give the comparison between Fixed channel allocation and Dynamic channel allocation. 7
 - (b) Describe following terms :
 - (i) Delay Spread
 - (ii) Coherence Bandwidth. 6

OR

4. (a) What is meant by cluster ? 2
- (b) Write short note on frequency reuse and hexagonal cell pattern. 6
- (c) Define cell. What is cell splitting ? 5
5. (a) Explain multicasting in mobile communication system. 7
- (b) Write short notes on GSM and IMT-2000. 6

OR

6. (a) Explain AMPS operation in detail. 7
- (b) What are hand-off parameters and its underlying support ? Explain. 6
7. (a) What do you mean by routing in mobile-adhoc network ? Explain dynamic source routing with neat diagram. 7
- (b) Explain the characteristics of MANET. 7

OR

8. (a) Write short note on, on-demand routing. 7
- (b) Discuss any two route optimization strategies. 7
9. (a) Explain the design of MAC management in IEEE 802.11 protocol. 7
- (b) Explain ultra-wide band technology with its two methods to generate wide spectra. 6

OR

10. (a) What is meant by topology ? Explain wireless personal area networks in detail. 7
- (b) Differentiate Wireless Metropolitan Area Network with Wireless Local Area Network. 6
11. (a) Discuss the characteristics and limitations of bluetooth. 6
- (b) What are the security threats to wireless network ? 7

OR

12. (a) What do you mean by XML ? Explain use of XML in designing. 7
- (b) Draw the bluetooth protocol stack and explain the core protocol. 6