Question Paper Code : 57492

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2016

Sixth Semester

Computer Science and Engineering

IT 6601 – MOBILE COMPUTING

(Common to Information Technology

(Regulations 2013)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions.

PART – A (10 × 2 = 20 Marks)

1. List the advantages of mobile computing.

2. Explain hidden and exposed terminal problems in infrastructure-less network.

3. What is DHCP ?

4. What is encapsulation in mobile IP ?

5. List the 3 important features of GSM security.

6. What are the main elements of UMTS.

7. List the characteristics of MANETs.

8. Compare MANET Vs VANET.

9. Give four examples of Mobile OS.

10. What is M-Commerce ?

1

PART – B (5 × 16 = 80 Marks)

11. (a) (i) Explain the characteristics of Mobile computing. (8)

        (ii) Explain the structure of Mobile Computing Application. (8)

OR

   (b) Explain the various taxonomy of MAC protocols in detail. (16)

12. (a) (i) With a diagram explain DHCP and its protocol architecture. (8)

        (ii) Explain IP-in-IP, Minimal IP and GRE encapsulation methods. (8)

OR

   (b) (i) With a neat diagram explain the Architecture of TCP/IP. (8)

        (ii) Explain the various improvements in TCP performance with diagram. (8)

13. (a) (i) Describe GSM architecture and its services in detail. (8)

        (ii) Explain GSM Authentication and Security. (8)

OR

   (b) (i) Explain GPRS and its Protocol architecture. (8)

        (ii) Explain in detail about UMTS architecture. (8)

14. (a) (i) Explain Characteristics, Applications of MANET. (4 + 4)

        (ii) Explain DSR Routing Protocols in detail. (8)

OR

   (b) (i) Draw and explain the architecture of VANET. (8)

        (ii) Explain the various Security and attacks on VANET. (8)

15. (a) (i) Explain the components of Mobile Operating Systems. (8)

        (ii) Write short notes on Android SDK. (8)

OR

   (b) (i) Explain the various applications of M-Commerce. (8)

        (ii) Explain the Mobile payment schemes and Security issues. (4 + 4)