Reg. No. :

Question Paper Code : 50767

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2017

Sixth Semester

Information Technology

IT 6601 – MOBILE COMPUTING

Common to Computer Science and Engineering

(Regulations 2013)

Time : Three Hours   Maximum : 100 Marks

Answer ALL questions

PART – A   (10×2=20 Marks)

1. List out the differences between Mobile Computing and Wireless Networking.

2. "MAC protocol designed for infrastructure based wireless network may not work satisfactory in infrastructure-less environment." – Justify.

3. To which layer do each of the following protocols belong to ? What is their functionality ?

    * RARP

    * DNS.

4. Differentiate the functionalities of a foreign agent and home agent.

5. List the services of GPRS.

6. Define Handoff. What are its types ?

7. Compare AODV and DSR protocols.

8. What are the contents of link state advertisement message ?

9. What are the constraints in Mobile OS ?

10. What are the advantages and disadvantages of BlackBerry OS ?

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PART – B   (5×16=80 Marks)

11. a) i) Explain hidden and exposed terminal problem in infrastructure-less network. (8)
     ii) Describe architecture of mobile computing. (8)

(OR)

b) What are the fixed assignment schemes of MAC protocol ? Explain their mechanism in detail. Compare and contrast them.

12. a) Illustrate packet delivery mechanism in Mobile IP network with a neat diagram.

(OR)

b) Discuss and compare the various mechanisms used to improve the TCP performance in mobile networks.

13. a) Explain GSM architecture and its services with neat diagram.

(OR)

b) Explain in detail about UMTS architecture and its services.

14. a) Discuss route discovery and route maintenance mechanisms in DSR with illustrations. List its merits and demerits.

(OR)

b) Describe the architecture of VANET with the functionality of the components. Compare VANET with MANET.

15. a) Illustrate the process of mobile payment. Compare and contrast mobile payment schemes.

(OR)

b) Explain android platform with its features, software stack and SDK.