Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : X 67578

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020
Eighth Semester
Electronics and Communication Engineering
EC 1451 – MOBILE AND WIRELESS COMMUNICATION
(Regulations 2008)

Time : Three Hours   Maximum : 100 Marks

Answer ALL questions

PART – A   (10×2=20 Marks)

1. Define frequency re-use concept.

2. What is the effect of Doppler in wireless medium ?

3. What are the features of IPv6 ?

4. Compare IMT 2000 with UMTS.

5. What are the distinct features of ad-hoc networks ?

6. Mention the applications of wireless sensor networks.

7. Name two types of power saving mechanisms.

8. What is a challenge response time ?

9. What is Glomosim ?

10. Define AODV.

PART – B   (5×16=80 Marks)

11. a) i) Explain in detail about SDMA technology with neat sketch.   (8)

    ii) Explain in detail about linear modulation technique with neat diagram.   (8)

(OR)

    b) Explain in detail about cellular communication and Handoff strategies with
       neat block diagram.   (16)

12. a) Explain the issues and challenges involved in location, routing and power management in wireless networks. Discuss how these issues are addressed by CDMA 2000 networks. **(16)**

(OR)

b) Discuss the general issues and challenges involved in mobility, handover and resource management in wireless networks. Explain how these issues are addressed by UMTS networks. **(16)**

13. a) Describe the architecture of Wireless Sensor Network and discuss the function of each module in detail.

(OR)

b) Write a short notes on DSR and AODV routing protocol.

14. a) Discuss the Security and Authentication issues in Mobile networks. **(16)**

(OR)

b) i) Explain in detail about Mobile IP and Ad-Hoc networks. **(10)**

ii) Write a note on VOIP applications. **(6)**

15. a) Design and evaluate the performance of various transport protocols of mobile using network simulator.

(OR)

b) Design and evaluate the performance of routing protocols of wireless networks using network simulator.

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