Total No. of Questions : 8]   [Total No. of Printed Pages :2

Roll No...................................

CS-8303

B.E. VIII Semester

Examination, December 2016

Wireless Networks

(Elective - III)

Time : Three Hours

Maximum Marks : 70

Note: Attempt any five questions. All questions carry equal marks.

1. a) Discuss the various generations of wireless networks. 7
   b) Explain the advantages and disadvantages of digital wireless system over analog wireless system. 7

2. a) Explain what path loss gradient means. Give some typical values of the path loss gradient in different environment. 7
   b) What do you mean by Doppler spectrum? How can we measure it? 7

3. a) What should be a relationship between call arrival rate and service rate when a cellular system is in steady state? Explain clearly. 7
   b) Explain radio propagation mechanism in mobile communication. 7

4. a) Discuss briefly the properties of wireless medium. 7
   b) Why power control mechanism in important in wireless networks? 7

5. a) Compare TDMA, SDMA, OFDM, FDMA, in terms of transmission technique, signal separation, advantages and disadvantages and their applications. 7
   b) Give a brief note on mobile application protocols. 7

6. a) Write short notes : 7
      i) FSK
      ii) PSK
      iii) QPSK
   b) Explain the architecture of Hiperlan. 7

7. a) What is meant by wireless LAN? Give the physical specification summary of the DSSS and FHSS used by the IEEE 802.11. 7
   b) Explain the architecture of Bluetooth system. What are the Bluetooth Technological characteristics? 7

8. Write short notes on : 14
   a) 3G network
   b) Ad hoc network
   c) GPRS
   d) Data oriented CDPD network

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