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Question Paper Code : 41298

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Eighth Semester

Electronics and Communication Engineering

080290075 – WIRELESS NETWORKS

(Regulation 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Distinguish between slow fading and fast fading.
2. Mention the channel access cycle in HIPERLAN1.
3. Define the term 'Doppler spread'.
4. What is frequency reuse?
5. Mention the need for power control in a CDMA system.
6. Draw the GPRS transport plane.
7. What is multicasting?
8. Mention the deployment considerations in infrastructureless network.
9. State the issues in designing a MAC protocol for Adhoc wireless networks.
10. Name the classification of MAC protocols.

PART B — (5 × 16 = 80 marks)

11. (a) Discuss about the reference model, terminologies and topologies for IEEE 802.11.

Or

- (b) Explain the challenges, applications and architecture of wireless sensor networks.

12. (a) Discuss the various techniques used to enhance the capacity of a cellular system.

Or

(b) Discuss about CSMA based wireless random access techniques.

13. (a) Discuss about the setup and ending of soft hand off in CDMA systems.

Or

(b) Explain the architecture of GSM.

14. (a) Discuss about the transport layer protocols in adhoc wireless networks.

Or

(b) Explain in detail about any two routing protocols of adhoc wireless networks.

15. (a) Explain hidden and exposed terminal problems and the relevant solution to rectify the same in adhoc networks.

Or

(b) Discuss about contention based MAC protocol with reservation mechanism.
