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Question Paper Code : 52930

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2019.

Eighth Semester

Electronics and Communication Engineering

EC 6802 — WIRELESS NETWORKS

(Regulation 2013)

(Common to : PTEC 6802 – Wireless Networks for B.E. (Part – Time) – Seventh Semester – Electronics and Communication Engineering (Regulations – 2014))

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Identify the need of WATM systems.

2. What are Piconet and Scatternet?

3. Define the term Care-of address in mobile IP.

4. Outline the characteristics of MANET.

5. Give any four schemes to improve the TCPs performance in wireless networks.

6. Identify the characteristics to be considered while deploying applications over 3G wireless links.

7. What is UMTS?

8. Define the Long-Term Evolution (LTE).

9. List the features of 4G.

10. Identify the focuses of Cognitive Radio.

PART B — (5 × 13 = 65 marks)

11. (a) Describe the IEEE 802.11 MAC data frame format with relevant diagram.

Or

(b) Give the strategy of logical link control and adaptation protocol (L2CAP).

12. (a) How the Tunneling and IP-in-IP encapsulation occur in the mobile IP?

Or

(b) Describe the Dynamic source routing with example.

13. (a) Explain the Congestion control, Slow start and Fast retransmit/fast recovery in traditional TCP.

Or

(b) Describe the Snooping TCP and points out the advantages and disadvantages.

14. (a) Outline the overview of UMTS Terrestrial Radio Access Network.

Or

(b) Illustrate the theory of High-Speed Downlink Packet Access (HSDPA)

15. (a) Categorize the four types of Smart antenna technique and explain in detail.

Or

(b) Summarize the 4G key challenges and mention the proposed solutions.

PART C — (1 × 15 = 15 marks)

16. (a) Analyse all possible solutions to be adopted for giving mobility support in the network layer such that both delay constraints along with throughput levels are achieved. (15)

Or

(b) How does the 3G GGSN/MSC differ from the GPRS architecture elements (2G GGSN/MSC)? What sort of enhancements are carried out in UMTS to meet out its specifications. (15)