Question Paper Code : 52586

B.E/B.Tech. DEGREE EXAMINATION, APRIL 2016

Eighth Semester

Electronics and Communication Engineering

EC 2050 / EC 804 / 10144ECE53 – MOBILE ADHOC NETWORKS

(Regulations 2008/2010)

Time : Three Hours   Maximum : 100 Marks

Answer ALL questions.

PART – A (10 × 2 = 20 Marks)

1. Differentiate Adhoc Network and Cellular Network.

2. What is scalability ?

3. Why Contention based Protocol is not suitable for real time traffic ?

4. Differentiate IEEE 802.11 Std and HIPERLAN.

5. What are the advantages and disadvantages of LAR Protocol ?

6. Why Proactive routing Protocols are not suitable for high mobility networks ?

7. Why TCP does not perform well in Adhoc networks ?

8. Define Wormhole Attack.

9. What is the need for cross layer design ?

10. Define Eavesdropping.

PART – B (5 × 16 = 80 Marks)

11. (a) (i) Describe the characteristics of the Wireless Channel. (11)

        (ii) Brief about the applications of Adhoc Network. (5)

OR

   (b) What is mesh Network ? Describe how it will operate in residential area. (16)

12. (a) (i) Discuss about the issues in designing a MAC layer Protocol for Adhoc Networks. (8)

        (ii) How the packets are transmitted in MACA Protocol and how the collision is avoided ? Explain. (8)

OR

   (b) Describe how the table update mechanism is implemented in distributed priority scheduling. (16)

13. (a) (i) How the forwarding zone and Expected zone improves the performance of LAR protocol ? Describe it. (8)

        (ii) Describe the hidden and Exposed Terminal Problem. (8)

OR

   (b) List out the classifications of Application independent Multicast protocol and explain the MZRP. (16)

14. (a) Describe the operations of Split TCP Protocol and its advantages and disadvantages. (16)

OR

   (b) (i) Give brief description about the Network layer attacks. (8)

        (ii) Transport layer attacks (4)

        (iii) Application layer attacks (4)

15. (a) Describe how the Adhoc Network is integrated with mobile IP Network. (16)

OR

   (b) What are the limitations of 2G and 3G network ? How Adhoc network can be integrated with 4G environment ? Explain it. (16)

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