Roll No. ....

Total Pages : 2

8502

BT-5/DX
COMPUTER NETWORKS
Paper : CSE-303

Time : Three Hours]   [Maximum Marks : 75

Note : Attempt *five* questions in all, selecting at least *one* question from each unit. All questions carry equal marks.

UNIT–I

1. (a) Explain the basis of having layered architecture.   9

    (b) Describe Manchester and Differential Manchester Encoding with examples.   6

2. (a) What is a Socket? What are the APIs available for socket programming?   5

    (b) Explain the working of SNMP.   10

UNIT–II

3. (a) Describe frame format of IEEE 802.3 and explain various fields.   6

    (b) Describe IEEE 802.11 distribution and intra-cell services.   9

4. (a) Draw the PPP phase diagram giving a typical scenario.   9

    (b) Give the differences between p-persistent, 1-persistent and non-persistent CSMA - CD.   6

UNIT–III

5. (a) What are different traffic management techniques available in packet switching networks?   7

    (b) Explain with the help of an example Dijkstra's algorithm as applied to Computer Networks.   8

6. (a) What do you mean by Quality of service? What does it signify? Discuss some QoS parameters.   7

    (b) What is the difference between end-to-end delay and packet jitter? What are the causes of packet jitter?   8

UNIT–IV

7. (a) Discuss TCP timer management specific to Retransmissions and RTT effects.   6

    (b) Describe the IPv6 header and explain salient features of this protocol and advantages over IPv4.   9

8. (a) What is ARP? Why is an ARP query sent within a broadcast frame? Why is an ARP response sent within a frame with a specific destination MAC address?   7

    (b) TCP congestion control has four key pieces: self clocking, slow start phase, congestion avoidance and fast retransmit/recovery. Explain what the role of each piece is, and how they are complementary to each other in terms of functionality.   8

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