

M.E. DEGREE EXAMINATIONS: NOVEMBER 2009

Third Semester

APPLIED ELECTRONICS

P07AEE10 High Performance Communication Networks

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions:-

PART A (10 x 2 = 20 Marks)

1. Define encapsulation and decapsulation.
2. What are the advantages of frame relay over X.25?
3. List out the features of ATM bearer services?
4. Define end to end transit delay time?
5. List out few ISDN services.
6. What are the services provided by B-ISDN?
7. What is MPLS?
8. What do you mean by Overlay model? Give one example?
9. Differentiate Scatternet and Piconet.
10. Name most popular antennas types used for Bluetooth.

PART B (5 x 16 = 80 Marks)

11. (a).(i). Write a note on PNNI Routing Protocol (8)
(ii). Draw and explain the header structure of ATM for both UNI and NNI (8)

(OR)

- (b).(i). Compare the backward explicit congestion notification with forward explicit congestion type (10)
(ii). Discuss the importance of CIR and DE bits? (6)

12. (a). (i). Explain the BISDN architecture with necessary diagram (10)
(ii). Explain the frame format of SONET (6)

(OR)

- (b). (i). Discuss the features of ISDN protocol architecture at UNI (10)
(ii). Write a note on U Interface? (6)

13. (a). (i) Write a note on LAN Interconnections? (8)
(ii). Explain the importance of various types of Ethernets? (8)

(OR)

- (b). (i). Explain how frame relay provides faster processing of packets (8)
(ii). Explain the protocol stack of FDDI with neat diagram (8)

14. (a). (i) Discuss the features of traffic conditioner with functional diagram? (8)
(ii). Compare guaranteed services and controlled load services? (8)

(OR)

- (b). Explain network configuration of MPOA with necessary topology? And also explain how Request and Reply process is completed in MPOA? (16)

15. (a). (i). Explain the packet header structure of Bluetooth with diagram (8)
(ii). Discuss the features of different antenna types used for Bluetooth (8)

(OR)

- (b). (i). Discuss the service discovery process of WAP? (8)
(ii). Write a note on Wireless user group signaling (8)
