

PART B (10 x 2 = 20 Marks)

11. State the purpose of layering in Networks?
12. What is meant by differential encoding?
13. State the difference between token ring and FDDI?
14. What are the advantages of LRC over VRC?
15. What is meant by IP spoofing?
16. What is the difference between Connection Oriented Network and Connectionless Network?
17. Draw the TCP segment format
18. What is the length of the 802.3 MAC address?
19. Why is DNS necessary? State its significance.
20. What is security parameter Index?

PART C (5 x 14 = 70 Marks)

21. a) (i) Describe the key elements of protocols and the standards. (7)
(ii) Explain in detail the data transmission in OSI reference model. (7)
(OR)
b) (i) Explain in detail about Guided Transmission media? (4)
(ii) What are the essential characteristics of an encoding scheme? Explain. (10)
22. a) (i) Explain 1 bit sliding window protocol. (8)
(ii) Explain the various unnumbered HDLC frames (6)
(OR)
b) Explain about in detail 802.11.
23. a) (i) How is the looping solved by switches and by routers. How do switches/routers handle link failure? (8)
(ii) Explain the IP addressing (6)
(OR)
b) (i) Compare Frame relay and X.25 network architecture. (7)
(ii) Difference between flow control and congestion control (7)
24. a) Discuss the various technical issues of transport layer. (OR)
b) What is the difference between UDP and TCP? Explain in detail about UDP.
25. a) Explain the role of a DNS on a computer network including its involvement in the process of a user accessing a web page. (OR)
b) (i) Explain DES encryption algorithm. How is it different from triple DES? (8)
(ii) Describe about Secret -Key cryptography. (6)
