

(3 Hours)

Total Marks: 80

N.B.: (1) Question No.1 is compulsory.

(2) Attempt any three questions from the remaining five questions.

(3) Make suitable assumptions wherever necessary but justify your assumptions.

- Q.1. a. Compare Bus and Star topology 05 M
b. List the internetworking devices and explain any one 05 M
c. Explain RLE with an example 05 M
d. Draw the UDP Header with its fields. 05 M
- Q.2.a. Draw and explain the OSI model briefly. 10 M
Q.2. b. Compare the switching technologies 10 M
- Q.3.a. Explain the Sliding Window Protocol with suitable diagrams 10 M
Q.3.b. Draw and explain the Fiber Optic Media and compare it with Twisted Pair 10 M
- Q.4.a. What is controlled media access? Explain the controlled media access techniques. 10 M
Q.4.b. Draw the IPv4 Header and explain the header format. 10 M
- Q.5.a. Compare TCP/IP and OSI 10 M
Q.5.b. Explain the distance vector routing with an example. 10 M
- Q.6. Write a short note on (Any Two) 20 M
a. Leaky bucket
b. SMTP
c. VLAN
d. Image Compression Techniques
