

(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. Explain TCP/IP Reference Model. 05 M  
 b. Explain Sliding Window Protocol. 05 M  
 c. Explain different classes of IPv4 Addresses. 05 M  
 d. Explain Domain Name System 05 M
- Q.2.a. Explain ISO-OSI reference Model 10 M  
 Q.2.b. What is Network Address translation? Explain. 10 M
- Q.3.a. Briefly explain TCP header with a diagram. 10 M  
 Q.3.b. What are different UDP Applications? 10 M
- Q.4.a. Explain IPv6 Header with a diagram. 10 M  
 Q.4.b. Explain Fast Ethernet and Gigabit Ethernet. 10 M
- Q.5.a. Compare Lossy Compression and Lossless Compression. 10 M  
 Q.5.b. Explain HTTP Protocol. 10 M
- Q.6. Write short notes on (Any Two) 20 M  
 a. Congestion Control  
 b. VLAN  
 c. Routing Algorithms.

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