

Group B [6x5=30]**Attempts any SIX questions**

2. Define protocols. Explain WWW and HTTP protocol. [1+2+2]
3. Define transmission impairment. Explain the causes of impairments. [1+4]
4. Define HDLC. Explain the HDLC frame formats. [1+4]
5. Define IP Address. Specify IPv4 address classes with their address ranges. [1+4]
6. Define Subnetting. Suppose you are given network address: 192.168.10.0 and subnet mask: 255.255.255.240 then calculate total number of subnets and numbers of hosts per subnet. [1+2+2]
7. Draw a User Datagram format. Explain UPD operations. [2+3]
8. Write short notes on (Any Two): [2.5+2.5]
 - a) DNS
 - b) Public Key Cryptography
 - c) VPN

Group C**Attempt any TWO questions. [2x10=20]**

9. Critically analyze the OSI reference model. [10]
10. Explain the random-access protocols under the multiple access taxonomy. [10]
11. Explain the IPv4 Header format in detail. [10]