

Duration: 3hrs

[Max Marks: 80]

- N.B.:** (1) Question No 1 is Compulsory.
(2) Attempt any three questions out of the remaining five.
(3) All questions carry equal marks.
(4) Assume suitable data, if required and state it clearly.

- Q1. Attempt any FOUR [20]
a Differentiate between OSI and TCP/IP Reference Model [05]
b Explain IEEE 802.3 frame structure with the help of suitable diagram [05]
c Explain in brief Stop and Wait ARQ Protocol with the help of suitable diagram [05]
d Explain in brief the I-frame, S-Frame and U-Frame of HDLC frame format [05]
e Explain Closed Loop Congestion Control Technique [05]
- Q2. a Differentiate between LAN, MAN WAN [10]
b Explain the various Physical Layer Interconnecting Devices with the help of suitable diagram [10]
- Q3. a Explain Synchronous Time Division Multiplexing & list the drawbacks of Synchronous Time Division Multiplexing [10]
b Explain CSMA/CD & list the advantages & disadvantages of CSMA/CD [10]
- Q4. a Explain the principle of packet switching and list the advantages and disadvantages of packet switching [10]
b Explain IPV4 Header Format with the help of suitable diagram [10]
- Q5. a Differentiate between TCP & UDP [10]
b Explain Crossbar Switch with the help of suitable diagram [10]
- Q6. a Write a short note on Hypertext Transfer Protocol (HTTP) in application layer with the help of suitable diagram [10]
b Explain Domain Name System (DNS) in application layer with the help of suitable diagram [10]
