

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 LAN, MAN & WAN [05]
 - b Explain HUB & Switch with the help of suitable diagram [05]
 - c Differentiate between Pure Aloha & Slotted Aloha [05]
 - d Draw IP Version 4 header Format [05]
 - e Explain Open Loop Congestion Control Technique [05]
- Q2. a Explain various network topologies with the help of suitable diagram & list the advantages & disadvantages of each network topology [10]
- b Explain various guided & unguided transmission media with the help of suitable diagrams. Also compare the major difference between guided & unguided transmission media [10]
- Q3. a Explain Stop-And-Wait ARQ Protocol & list the advantages & disadvantages of Stop-And-Wait ARQ Protocol [10]
- b Compare Stop-And-Wait ARQ, Go-Back-N ARQ & Selective Repeat ARQ flow control techniques [10]
- Q4. a Explain Non-Persistent, 1-Persistent & P-Persistent CSMA with the help of suitable diagram [10]
- b Explain Time Slot Interchange Switch with the help of suitable diagram [10]
- Q5. a Explain Crossbar Switch with the help of suitable diagram [10]
- b Explain UDP header with the help of suitable diagram & list the applications of UDP [10]
- Q6. a Explain Domain Name System (DNS) in application layer with the help of suitable diagram [10]
- b Write a short note on ADSL [10]

.....