[6353]-50

T.E. (AI & DS)
COMPUTER NETWORKS
(2019 Pattern) (Semester - I) (317521)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates :

1) *Attempt Q.1 or Q.2, Q.3 or Q.4 Q.5 or Q. 6, Q.7 or Q.8.*
2) *Figures to the right indicate full marks.*
3) *Neat diagrams must be drawn wherever necessary.*
4) *Assume suitable data, if necessary.*

Q1) a)   Explain various Switching Techniques in Network Layer.   **[9]**

b)   Describe ICMP with header format using neat diagram.   **[9]**

OR

Q2) a)   Compare routing protocols RIP, OSPF, BGP.   **[9]**

b)   Describe link state routing algorithm with example.   **[9]**

Q3) a)   Draw TCP header and explain TCP connection 3-way handshake.   **[9]**

b)   Differentiate between TCP and UDP Protocol.   **[8]**

OR

Q4) a)   Explain Stream Control Transmission Protocol (SCTP). What are its advantages over TCP and UDP, and where is it commonly used.   **[9]**

b)   Discuss the Quality-of-Service Parameter in Computer Network.   **[8]**

P.T.O.

Q5) a) Explain Simple mail Transfer Protocol. **[9]**

b) Discuss the Simple Network Management Protocol (SNMP) and its role in network management and monitoring. **[9]**

OR

Q6) a) Why we need DHCP? Explain header format in detail? **[9]**

b) Differentiated between Persistant and Nonpersistant HTTP? **[9]**

Q7) a) Explain IEEE 802.3 Standards and Frame Format. **[9]**

b) Differentiate between Pure ALOHA and Slotted ALOHA. **[8]**

OR

Q8) a) Write Short note on IEEE 802.15 and IEEE 802.16. **[9]**

b) Explain the concept of CSMA/CD. **[8]**

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