Total No. of Questions : 8]

SEAT No. :

PB3791

[Total No. of Pages :2

[6262]-50

T.E. (Artificial Intelligence and Data Science Engg.)
COMPUTER NETWORKS
(2019 Pattern) (Semester-I) (317521)

Time : 2½ Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) ***Solve Question 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 indicates full marks.***
3) ***Neat diagram must be drawn wherever necessary.***
4) ***Assume suitable data, if necessary.***

Q1) a) Explain any two routing protocols. **[6]**

b) Write short note on Network Address Translation. **[6]**

c) Explain Link State Routing Algorithm with example. **[6]**

OR

Q2) a) Explain Distance Vector Routing Algorithm with example. **[6]**

b) Explain. **[6]**

i) Address Resolution Protocal (ARP)

ii) Internet Control Message Protocal (ICMP)

c) Explain the concepts of classful (A, B, C, D & E) & Classless addressing. **[6]**

Q3) a) Discuss the quality of service (QoS) parameters in computer network. **[6]**

b) What is the difference between TCP and UDP, Explain TCP header format in detail. **[6]**

c) Explain RTP protocol in detail. **[5]**

OR

Q4) a) Draw and Explain TCP header format in details? **[6]**

b) What are the techniques to improve Quality of Service (QoS)? **[6]**

c) Explain different elements of Transport protocal. **[5]**

P.T.O.

Q5) a) What is HTTP? Explain HTTP request and reply message format. **[6]**

b) Explain SNMP protocol in details. **[6]**

c) Explain DNS frame format. **[6]**

OR

Q6) a) Explain FTP? Can we specify file transfer file in a Web page? Explain with the help of suitable example. **[6]**

b) Explain simple mail transfer protocol. **[6]**

c) Write a short note on **[6]**

i) POP3

ii) TELNET

Q7) a) Explain IEEE 802.15 and IEEE 802.16 in details. **[6]**

b) Explain Binary Exponential Back off Algorithm. **[6]**

c) Explain various frame formats. **[5]**

OR

Q8) a) Explain 802.11 a/b/g in details. **[6]**

b) Explain CSMA/CD in details. **[6]**

c) Differentiate between Pure ALOHA & Slotted ALOHA. **[5]**