

Total No. of Questions : 8]

SEAT No. :

PB3791

[6262]-50

[Total No. of Pages :2

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 Protocol (ARP)
ii) Internet Control Message Protocol (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 protocol. [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]

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