

Total No. of Questions : 8]

SEAT No. :

P-7596

[Total No. of Pages : 2

[6180]-113

T.E. (E & TC)

COMPUTER NETWORKS

(2019 Pattern) (Semester - I) (304185D) (Elective - I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data, if necessary.

- Q1)** a) Explain the various performance parameters of network layer. [7]
b) Discuss the ICMPv4 Protocol. [7]
c) Compare IPv4 vs IPv6. [4]

OR

- Q2)** a) Explain the concept of classful and classless addressing. [7]
b) Compare datagram switching and virtual circuit switching. [7]
c) Explain the network id and host id. [4]

- Q3)** a) Explain distance vector routing algorithm. [7]
b) Explain Routing Information protocol. [7]
c) Explain intra domain multicast protocol. [4]

OR

- Q4)** a) Which strategies are used while transition from IPv4 to IPv6 addressing? [7]
b) Explain the link state routing algorithm. [7]
c) Explain inter-domain multicast protocol [4]

- Q5)** a) What is congestion control? Explain the leaky bucket algorithm with suitable diagram. [8]
b) Explain the difference between TCP and UDP. [8]

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OR

- Q6)** a) Explain TCP Connection establishment, TCP data transfer and TCP connection termination. [8]
b) Explain stream control transmission protocol. [8]

- Q7)** a) List the functions of application layer. Explain the DNS in detail. [9]
b) Explain telnet and FTP. [9]

OR

- Q8)** Write short notes : [18]
a) DHCP
b) BOOTP
c) SMTP