

Total No. of Questions : 8]

SEAT No. :

PC1778

[Total No. of Pages : 2

[6353]-97

T.E. (E & TC)

COMPUTER NETWORKS

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

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.

- Q1)** a) Explain different network layer design issues. [4]
- b) Give classification of switching? Explain packet switching in detail. [6]
- c) Explain network layer protocols with suitable diagram. [6]

OR

- Q2)** a) Compare connection oriented and connectionless services. [4]
- b) Explain the concept of classful and classless addressing. [6]
- c) Draw and explain IPV4 frame format. [6]

- Q3)** a) What are different methods are used for transfer the packets? Explain broadcast routing with advantages and disadvantages. [6]
- b) Explain Internet Group Message Protocol (IGMP) with suitable architecture diagram. [6]
- c) Explain in detail path vector with suitable diagram. [6]

OR

P.T.O.

- Q4)** a) Explain OSPF with suitable diagram and special areas. [6]
b) Explain BGP with four different messages. [6]
c) Compare link state routing algorithm and distance vector algorithm. [6]

- Q5)** a) List the features of transport layer services provided to upper layer. Explain one in detail. [4]
b) What are transport service primitives? Explain in brief. [6]
c) Explain in detail TCP with header format. [8]

OR

- Q6)** a) List and explain services provide by SCTP. [4]
b) What is congestion control? List the typical QoS parameters in the transport layer and explain each one. [6]
c) Explain user datagram protocol. [8]

- Q7)** a) Explain feature of HTTP. [4]
b) Explain TELNET in detail with respect to server and client communication. [6]
c) What are the different commands used in FTP? Explain File transfer Protocol in detail. [8]

OR

- Q8)** a) Write short on SMTP. [4]
b) Explain post office protocol with neat diagram. [6]
c) Explain with neat diagram working of Bootstrap protocol (BOOTP). [8]

