Total No. of Questions : 8] **SEAT No. :**

PA-1490 **[Total No. of Pages : 2**

[5926]-110
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 diagram must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Assume suitable data, if required.***

Q1) a) Discuss the packet switching technique. **[6]**

b) Discuss the network layer services. **[4]**

b) Explain the classful addressing in IPV4 protocol. **[6]**

OR

Q2) a) Discuss IPV6 protocol. **[6]**

b) Compare circuit switching Vs packet switching. **[4]**

c) Explain ICMPV6 protocol (ICMPv6). **[6]**

Q3) a) Explain unicast and multicast routing. **[6]**

b) Explain Dijkstra's algorithm for shortest path routing. **[6]**

c) Explain IGMP protocol (IGMP protocol) **[6]**

OR

Q4) a) Explain routing information protocol. **[6]**

b) Explain path vector routing. **[6]**

c) Discuss border gateway protocol. **[6]**

Q5) a) Explain TCP services and its features. **[6]**

b) Explain stream control transmission protocol. **[6]**

c) Explain transport layer quality of services parameters. **[6]**

OR

P.T.O.

Q6) a) Explain TCP connection establishment using three way handshaking. **[6]**

b) Explain UDP protocol and its features. **[6]**

c) Explain congesting control in TCP. **[6]**

Q7) a) Explain telnet protocol. **[6]**

b) Explain FTP protocol. **[6]**

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

OR

Q8) a) Explain internet message access protocol. **[6]**

b) Explain how DNS server work. **[6]**

c) Explain Dynamic host configuration protocol. **[6]**

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