

Total No. of Questions : 8]

SEAT No. :

PE5978

[Total No. of Pages : 2

[6583]-102R

T.E. (E & TC)

COMPUTER NETWORKS

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

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicates full marks.
- 4) Assume suitable data if necessary.

**Q1)** a) What are the various performance parameters of network layer. Explain. [7]

b) Explain in details classful and classless addressing. [7]

c) Give comparison between IPV4 and IPV6. [4]

OR

**Q2)** a) Discuss packet switching technique in detail. [7]

b) Explain ICMPV6 protocol (ICMPv6). [7]

c) Discuss the network layer services. [4]

**Q3)** a) Explain Dijkstra's algorithm for shortest path routing. [6]

b) Discuss border gateway protocol (BGP). [5]

c) What is Routing? Explain unicast and multicast routing. [6]

OR

**Q4)** a) What is the use of OSPF? Discuss OSPF. [6]

b) Compare Intra and Interdomain routing. [5]

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

**Q5)** a) Explain the difference between TCP and UDP. [9]

b) Explain the leaky bucket algorithm with suitable diagram. [9]

OR

P.T.O.

- Q6)** a) Explain stream control transmission protocol. [9]  
b) Discuss the scheduling Technique to Improve the Quality of Services (QoS). [9]

- Q7)** a) List the functions of application layer. Explain the DNS in detail. [9]  
b) Write short notes: [8]  
i) DHCP  
ii) FTP

OR

- Q8)** a) Explain HTML programming and related TAGS in brief. [6]  
b) Explain how DNS server work. [6]  
c) Explain Dynamic host configuration protocol. [5]

