

Total No. of Questions : 8]

SEAT No. :

PD4297

[6403]-95

[Total No. of Pages : 2

T.E. (Electronics & Telecommunication Engineering)

COMPUTER NETWORKS

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

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 side indicate full marks.
- 4) Use of Calculator is allowed.
- 5) Assume Suitable data if necessary.

- Q1) a) Explain the various performance parameters of network Layer. [6]
- b) Explain the services provided by Network Layer. [6]
- c) Compare datagram switching and virtual circuit switching. [6]

OR

- Q2) a) Explain error reporting messages, informational messages, neighbor discovery messages and group membership messages related to ICMPv6. [6]
- b) Explain network id and host id. [6]
- c) What is difference between classless addressing and classfull addressing related to IPv4 addresses? [6]

- Q3) a) Explain unicast routing and multicast routing protocol. [9]
- b) What is routing? Explain the distance vector routing algorithm. [8]

OR

- Q4) a) What is routing? Explain the link state routing algorithm. [9]
- b) Explain inter-domain and intra-domain routing. [8]

P.T.O.

- Q5)** a) Explain TCP services and its features with relevant diagram. [9]  
b) Explain various transport layer quality of services parameters. [8]

OR

- Q6)** a) Explain TCP connection establishment using three way handshaking. [9]  
b) Explain UDP protocol and its features with relevant diagram. [8]

- Q7)** a) Explain the DNS in detail. [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 works. [6]  
c) Explain dynamic host configuration protocol. [6]

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