

Total No. of Questions : 4]

SEAT No. :

P8576

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Oct-22/TE/Insem-556

T.E. (E&TC Engineering)

COMPUTER NETWORKS

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

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Answer the Q.1 or Q.2 and Q.3 or Q.4.
- 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) Draw the OSI model and discuss the function of each layer. [6]
b) Define topology? Explain Star Topology. [4]
c) What are the design issues for the layers? Discuss the design issues for the layers. [5]

OR

- Q2)** a) Explain TCP/IP Protocol suite. [6]
b) Compare TCP/IP vs OSI Model. [4]
c) Draw the diagram of relationship of layers and address in TCP/IP and explain the concept of physical and logical addressing. [5]

- Q3)** a) Discuss the bit oriented protocol. [6]
b) Explain transition phases in PPP (point to point) Protocol. [4]
c) A slotted ALOHA network transmits 200-bits frames using channel with a 200-kbps bandwidth. What is throughput if the system (all together) produces. [5]
i) 1000 frames per second
ii) 500 frames per second
iii) 250 frames per second

P.T.O.

OR

- Q4)** a) Explain CSMA/CA protocol. [6]
- b) Explain the procedure for pure ALOHA protocol with suitable flow chart. [4]
- c) Explain the concept of select and poll function in polling access method. [5]

