

Total No. of Questions : 4]

SEAT No. :

**P5053**

[Total No. of Pages : 1

**[6187]-456**

**T.E. (E & TC Engineering) (Insem)**

**COMPUTER NETWORKS**

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

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) Answer Q.1 or Q.2, and Q.3 or Q.4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Use of Calculator is allowed.
- 5) Assume suitable data, if necessary.

- Q1)** a) Explain TCP/IP protocol suite. [6]  
b) Compare OSI model and TCP/IP model. [4]  
c) What are the design issues for the layers? Discuss the design issues for the layers. [5]

OR

- Q2)** a) Draw the OSI model and discuss the function of each layer in OSI model. [6]  
b) Discuss source to destination delivery with suitable diagram. [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 character oriented protocol with diagram. [6]  
b) Explain reservation access in controlled access method. [4]  
c) A pure ALOHA network transmits 200-bit frames on a shared channel of 200kbps. 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.

OR

- Q4)** a) Explain Go-Back-N automatic repeat request protocol. [6]  
b) List the functions of data link layers? Define framing, flow control, Error control and Media access control. [4]  
c) Draw HDLC Frame format and explain each field. [5]

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