

Total No. of Questions : 4]

SEAT No. :

**PC53**

**[6360]-54**

[Total No. of Pages :1

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

**COMPUTER NETWORKS**

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

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Answer questions Q1 or Q2, Q3 or Q4.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data if necessary.*

- Q1)** a) Draw and explain OSI reference model with functions of its layers. [6]  
b) Explain different types of network topologies. [5]  
c) Explain design issues for layers. [4]

OR

- Q2)** a) Draw TCP/IP reference model and explain the functions of each layers.[6]  
b) Draw and explain local area network and wide area network. [5]  
c) Explain different types of addressing in TCP/IP reference model. [4]

- Q3)** a) Explain bit stuffing and character stuffing framing method in DDL. [5]  
b) Explain 1-persistent and non-persistent CSMA protocol. [5]  
c) Explain reservation and polling methods of controlled access protocol.[5]

OR

- Q4)** a) Explain CSMA/CD protocol in detail. [5]  
b) Explain Go-back-N protocol. [5]  
c) Explain TDMA channelization methods. [5]

