

Total No. of Questions : 4]

SEAT No. :

**P8558**

[Total No. of Pages : 1

**Oct-22/TE/Insem-528**

**T.E. (Computer Engineering)**

**COMPUTER NETWORKS AND SECURITY**

**(2019 Pattern)(Semester-I) (310244)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

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

- Q1)** a) Explain LAN, MAN, WAN. [6]  
b) What are design issues of layers? Explain it. [5]  
c) Explain [4]  
i) Router  
ii) Switch

OR

- Q2)** a) Explain Client Server and Peer to Peer Network. [6]  
b) Draw Manchester and differential Manchester code for the bit sequence: 0100110 [5]  
c) Explain Star and Bus topologies. [4]
- Q3)** a) Give brief about design issues in DLL. [6]  
b) Differentiate between Pure and Slotted ALOHA [5]  
c) Explain PPP. [4]

OR

- Q4)** a) Sender Sends code 1001101 justify receiver using Hamming code. [6]  
b) Explain IEEE 802.3 frame format. [5]  
c) Explain Stop and Wait Protocol. [4]

