

Total No. of Questions : 4]

SEAT No. :

P-5028

[Total No. of Pages : 1

[6187]-428

T.E. (Insem.) (Computer Engineering)
COMPUTER NETWORKS & SECURITY
(2019 Pattern) (Semester - I) (310244)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4.*
- 2) *Neat diagrams must be drawn whenever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume Suitable data if necessary.*

- Q1)** a) Draw and explain OSI Model. [6]
b) Explain Direct Sequence Spread Spectrum. [5]
c) Explain i) Router ii) Switch. [4]

OR

- Q2)** a) Explain TCP/IP Model. [6]
b) Draw Manchester and differential Manchester code for the bit sequence: 01001011. [5]
c) Explain Ring and Mesh topologies. [4]

- Q3)** a) Justify answer using CRC for divisor: 1101 dividend: 100100. [6]
b) Explain IEEE 802.15 frame format. [5]
c) Give brief about design issues in DLL. [4]

OR

- Q4)** a) What is sliding window protocol? How it works? [6]
b) Explain CSMA in detail. [5]
c) Explain PPP. [4]

