

Total No. of Questions : 6]

SEAT No. :

P5091

[Total No. of Pages : 2

T.E./Insem. - 640
T.E. (Computer Engineering)
COMPUTER NETWORK
(2015 Pattern) (Semester-I)

Time : 1 Hour

[Max. Marks : 30

Instructions to the candidates:

- 1) Attempt Q.1 or Q.2, Q.3 or Q.4 & Q.5 or Q.6.
- 2) Neat diagram must be drawn wherever necessary.
- 3) Figure to the right indicate full marks.
- 4) Assume suitable data, if necessary.

- Q1)** a) What are the design issues of layers? Explain it. [5]
b) What are the different network devices? Explain difference between switch and hub. [5]

OR

- Q2)** a) What are the transmission techniques used by 802.11 to send a MAC frame from one station to another? Explain two of them. [5]

- b) What is line encoding? Give the Manchester line code and differential Manchester code for the bit sequence: 1100110 [5]

- Q3)** a) What is need of framing? What are the different techniques of framing? Explain any two. [5]
b) The data word 1101011011 is to be sent using generator polynomial x^4+x+1 , Use CRC to compute the code word at the sender side. [5]

OR

- Q4)** a) Explain Go back N Sliding window protocol with example. [5]
b) Explain bit oriented protocol for communication over point to point and multipoint link. [5]

P.T.O.

- Q5)** a) Draw and explain frame format of 802.16 standard. [5]
b) Consider building a CSMA/CD network running at 1 Gbps over a 1km cable with no repeaters. The signal speed in the cable is 200000km/sec. What is the minimum frame size? [5]

OR

- Q6)** a) State the difference between static and dynamic channel allocation? Give two examples for each? [5]
b) Explain working of CSMA/CA with the help of flow diagram. [5]

