

Total No. of Questions : 6]

SEAT No. :

**P5146**

[Total No. of Pages : 2

**BE/Insem - 552**  
**B.E. (E & TC)**  
**Computer Networks**  
**(2012 Pattern)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) Answer Q.1 or Q.2, Q.3 or Q.4. Q5 or Q.6.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right side indicate full marks.*
- 4) Assume suitable data if necessary.*

- Q1)* a) Draw the OSI model. List and explain functions of data link layer [6]
- b) List the different types of cables used in networking with their connectors and applications. [4]

OR

- Q2)* a) Draw and explain data communication system [6]
- b) Draw star topology and explain its advantages and disadvantages [4]
- Q3)* a) Explain bit stuffing framing method. [6]
- b) Explain 1 persistent and nonpersistent CSMA protocol. [4]

OR

- Q4)* a) Explain 3 types of HDLC frames. [6]
- b) Explain the Go back N sliding window protocol. [4]

*P.T.O.*

- Q5)** a) Explain Basic and Extended Service sets in 802.11 standard [6]  
b) List the connecting devices and explain any one. [4]

OR

- Q6)** a) Explain Bluetooth architecture. [6]  
b) Explain the concept of virtual LAN [4]

