Total No. of Questions : 10] **SEAT No. :**

P2265 **[Total No. of Pages : 2**

[5254]-602
B.E. (E & TC)
COMPUTER NETWORKS
(2012 Pattern) (Semester - I)

Time : 2½ Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***Answer Q. 1 or Q. 2, Q. 3 or Q. 4, Q. No. 5 or Q. 6 or Q.7 or Q. 8. Q.9 or Q. 10.***
2) ***Neat diagram must be drawn wherever necessary.***
3) ***Figures to the right side indicate full marks.***

Q1) a) Explain UTP? Why it is twisted? **[5]**

b) Explain sliding Window Protocol? **[5]**

OR

Q2) a) Explain Selective Repeat ARQ Protocol used for Noisy channel? **[5]**

b) Explain Bluetooth Profile? **[5]**

Q3) a) Explain Microwave Transmission in unguided transmission media? **[4]**

b) Explain Non Persistent, 1-Persistent, P-Persistent CSMA? **[6]**

OR

Q4) a) Write a short note on Zigbee? **[4]**

b) Explain LCP & NCP used in PPP stack? **[6]**

Q5) a) Explain NAT, ARP at Network Layer? **[8]**

b) Explain $ICMP_v4$? **[4]**

c) List and Explain different types of addresses used in IP_v6? **[5]**

OR

Q6) a) Explain Transition strategies from IP_v4 to IP_v6? **[8]**

b) Explain Forwarding and Delivery in IP_v4? **[9]**

P.T.O.

Q7) a) Explain different services provided by Transport Layer? **[6]**

b) Explain three way handshakes during connection establishment at Transport Layer? **[5]**

c) Explain Transport Service Primitives? **[6]**

OR

Q8) a) Explain a Real Time Transport Protocol? **[6]**

b) Draw and Explain TCP segment Header? **[6]**

c) Explain User datagram Protocol? **[5]**

Q9) a) Explain different services provided by user agent in e-mail system? **[6]**

b) Explain URL and Cookies? **[6]**

c) Compare Persistent and Non persistent HTTP connections? **[4]**

OR

Q10) a) Explain file Transfer Protocol? **[6]**

b) Write short note on DNS? **[6]**

c) Explain Authorization Vs Authentication? **[4]**