Total No. of Questions : 6]

SEAT No. : ____

P5797

[Total No. of Pages : 2

BE/Insem/Oct-547
B.E. (E & TC)
COMPUTER NETWORKS & SECURITY
(2015 Pattern) (Semester - I)

Time : 1 Hour] ***[Max. Marks : 30***

Instructions to the candidates:

1) ***Answer any 3 questions from Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***use of logarithmic tables rule, mollier charts, electronic pocket calculator and steam tables is allowed.***
5) ***Assume suitable data, if necessary.***

Q1) a) Explain Hidden station problem & Exposed station problem in CSMA/CD? **[5]**

b) A pure ALOHA network transmits 200-bit frames on a shared channel of 200 kbps. What is the throughput if the system (all stations together) produces **[5]**

i) 1000 frames per second

ii) 500 frames per second

OR

Q2) a) Write different address used in TCP/IP protocol suit with suitable example. **[5]**

b) Write & Explain Base band Ethernet. **[5]**

Q3) a) Explain the term Subneting & Superneting? **[4]**

b) Draw IP Datagram & Explain function of each? **[6]**

OR

Q4) a) Explain need of ICMP? What are functions of ICMP in IPv4? **[6]**

b) Explain Multiplexing & De-multiplexing in IPv4. **[4]**

P.T.O.

Q5) a) Draw & Explain IPv6 fixed header or datagram format. **[5]**

b) Explain Distance Vector Routing Algorithm with suitable example? **[5]**

OR

Q6) a) Explain transition of IPv4 to IPv6? **[5]**

b) Explain unicast open shortest path first routing protocol. **[5]**