Total No. of Questions :10]

SEAT No. :

P2615

[Total No. of Pages :2

[5153] - 591

T.E. (Information Technology)

COMPUTER NETWORK TECHNOLOGY

(2012 Pattern) (Semester - I) (End-Sem.)

Time : 2½Hours] *[Max. Marks :70*

Instructions to the candidates:

1) ***Neat diagrams must be drawn wherever necessary.***
2) ***Figures to the right indicate full marks.***
3) ***Your answers will be valued as a whole.***
4) ***Assume suitable data if necessary.***

Q1) a) Differentiate among circuit switching, packet switching and message switching with one example. **[6]**

b) Explain various transport layer services. **[4]**

OR

Q2) a) What is socket? Explain various client and server socket primitives. **[6]**

b) Write a short note on Quality of service. Parameters in Transport layer. **[4]**

Q3) a) A company is granted a site address 201.70.64.0. The company needs six subnets. Design the subnets. **[6]**

b) Lists the areas of network management and explain the necessity of any three. **[4]**

OR

Q4) a) What is DNS? What is server hierarchy? Explain domain name resolution process. **[6]**

b) Explain in detail how TCP provides flow control. **[4]**

P.T.O.

Q5) a) Explain the basic architecture of WLAN and discuss various components in it. **[10]**

b) Compare: Bluetooth and wireless LAN. **[8]**

OR

Q6) a) Explain Bluetooth features and architecture with suitable diagram. **[10]**

b) Explain frame format of 802.16. **[8]**

Q7) a) Explain following terms w.r.t. WSN: **[8]**

i) Data aggregation.

ii) Data diffusion.

iii) Data dissemination.

iv) Multicast.

b) What are different design issues of MAC protocol for WSN? **[8]**

OR

Q8) a) List different routing protocols used by WSN. Explain any one in detail. **[8]**

b) Explain Set up phase and steady state phase of LEACH protocol. **[8]**

Q9) a) Explain the tasks of address management in WSN. **[8]**

b) Describe DSDV Routing protocols. **[8]**

OR

Q10) Write short note on (any two): **[16]**

a) Internet of Things (IoT).

b) Software Defined Networking (SDN).

c) BYOD.

EEE