

Total No. of Questions :10]

SEAT No. :

P2615

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[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.

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