T.E. (Information Technology) (Semester – II) Examination, 2010
COMPUTER NETWORK TECHNOLOGY
(2003 Course)

Time : 3 Hours   Max. Marks : 100

Instructions : 1) Answer **3** questions from Section – **I** and **3** questions from Section – **II**.
2) **Neat** diagrams must be drawn **wherever** necessary.
3) Assume suitable data, if **necessary**.

SECTION – I

1. A) Explain link state and distance vector routing with example.   **8**

   B) Explain the difference between interdomain and intradomain routing protocols with example.   **8**

OR

2. A) Explain NAT. Why it is needed ? How does it operate ?   **8**

   B) For a given class C network, how will you divide it in 8 equal subnets ? Consider default subnet mask.   **8**

3. A) Explain the flow control mechanism used in TCP.   **8**

   B) What is silly window syndrome ? How to overcome it ?   **8**

OR

4. A) List and discuss the performance issues of transport layer.   **8**

   B) How will you differentiate a stream socket from datagram socket ? How data transmission happens in a datagram mode without acknowledgement ?   **8**

5. A) Why FTP requires two TCP ports ? Give atleast six commands of FTP.   **8**

   B) Differentiate POP3 and IMAP.   **5**

   C) Compare and contrast RPC and UDP.   **5**

OR

6. A) What is CGI ? Where and how it is used ? 8

   B) Just name any five resource records used in DNS with one line explanation. 5

   C) Write a short note on LDAP. 5

SECTION – II

7. A) Explain the MIB along with its structure. 8

   B) Differentiate between SIP and H323. 8

OR

8. A) Explain any two real time protocols. 8

   B) Give any two policing methods used in multimedia communications. 8

9. A) Explain the role of SMI in SNMP. Give the data types supported by SMI. 8

   B) Explain stepwise the procedure carried out by DHCP client and DHCP server. 8

OR

10. A) List and explain the principal components of network management architecture. 8

    B) List the five areas of network management and explain the necessity of each. 8

11. A) Explain 802.11 architecture. 8

    B) Write a short notes on : 10
       a) SMDS
       b) ATM protocol stack.

OR

12. Write detail notes on : 18
    a) Bluetooth
    b) Frame relay
    c) WLAN architecture.