

Total No. of Questions : 12]

SEAT No. :

P1430

[Total No. of Pages : 3

[4858] - 203

T.E. (Information Technology)
COMPUTER NETWORK TECHNOLOGY
(2008 Pattern) (Semester - I)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates :-

- 1) *Answers to the two sections should be written in separate answer books.*
- 2) *From section I answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 and answer Q.7 or Q.8, Q.9 or Q.10, Q.11 or Q.12*
- 3) *Neat Diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*

SECTION - I

- Q1)** a) Differentiate among circuit switching, packet switching and message switching. Give at least one example. [10]
- b) Explain with example. [8]
- i) Hierarchical routing Algorithm.
- ii) Link State routing Algorithm.

OR

- Q2)** a) Explain the difference between interdomain and intradomain routing protocols with example. [9]
- b) What do you mean by congestion? Explain any two congestion control algorithms in virtual circuit subnets. [9]

- Q3)** a) Differentiate between BOOTP and DHCP. [8]
- b) Compare between IPv4 and IPv6. [8]

OR

P.T.O.

- Q4)** a) What is NAT? Explain its operation with an example. [8]
b) Consider any class - B network with default subnet mask. Design the subnet in such a way that each has 126 nodes. Write the range of IP addresses for all subnets. [8]

- Q5)** a) Explain how TCP provide flow control mechanism. [8]
b) What is silly window syndrome? How to overcome it? [8]

OR

- Q6)** a) What is a Socket? Explain various socket primitives used in client-server interaction. [8]
b) What do you mean by flow control in transport layer? What are the different methods to achieve it? [8]

SECTION - II

- Q7)** a) What is cookie? Where and how it is used. [4]
b) Differentiate between FTP and TFTP. [6]
c) What is the purpose of SMI and MIB in relation to SNMP? [6]

OR

- Q8)** a) List the five areas of network management and explain the necessity of each. [8]
b) Explain working of DNS in detail. [8]

- Q9)** a) Explain the RTSP protocol. Why this protocol is needed? [8]
b) Differentiate between SIP and H.323 protocol. [8]

OR

- Q10)** a) What is meant by interactivity for streaming stored audio/video? [8]
b) Explain Round Robin and Weighted Fair Queuing algorithm for scheduling. [8]

- Q11)*** a) Discuss various layers used in ATM architecture. [9]
b) Explain Bluetooth architecture with diagram. [9]

OR

Q12) Write a short note on : [18]

- a) Limitations of Bluetooth
- b) ATM Switch
- c) X.25

