

Total No. of Questions : 12]

SEAT No. :

Nov- Dec- 2012

P833

[Total No. of Pages : 2

[4263] - 353

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

Time : 3 Hours]

[Max. Marks :100

Instructions to the candidates:

- 1) *Answer three questions from each Section.*
- 2) *Answers to the two sections should be written in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*
- 5) *Your answer will be valued as a whole.*
- 6) *Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.*

SECTION - I

- Q1)** a) Explain in detail Link State routing algorithm with example. [8]
b) What is flow control mechanism? What is the role of timer in the flow control. [8]

OR

- Q2)** a) What is routing? State different types of routing? Write properties of routing algorithm. [8]
b) Compare virtual circuit subnet and datagram subnet. [8]

- Q3)** a) Differentiate between BOOTP and DHCP. [8]
b) Explain in detail BGP. [8]

OR

- Q4)** a) Is fragmentation supported by IPv4 and IPv6? Explain. [6]
b) Consider any class - C network with default subnet mask. Design the subnet in such a way that each has 62 nodes. Write the range of IP addresses for all subnets. [10]

- Q5)** a) Explain with example various types of sockets. [8]
b) Explain all the fields of TCP header. [10]

P.T.O.

OR

- Q6) a) What is a Socket? Explain various socket primitives used in client-server interaction. [10]
- b) What do you mean by flow control in transport layer? What are the different methods to achieve it? [8]

SECTION - II

- Q7) a) List the similarities and differences between POP3 and IMAP. [8]
- b) Explain working of DNS in detail. [8]

OR

- Q8) a) List and describe seven message types in SNMP. [8]
- b) Where and when FTP is used? Explain the importance of two parts in FTP? [8]

- Q9) a) Explain Round Robin and Weighted Fair Queuing algorithm for scheduling. [8]
- b) Explain the RTSP protocol. Why this protocol is needed. [8]

OR

- Q10) a) What do you mean by integrated services? Explain with suitable example. [8]
- b) What is meant by interactivity for streaming stored audio/ video? [8]

- Q11) a) Describe WLAN architecture in detail. [9]
- b) Explain Bluetooth architecture with diagram. [9]

OR

Q12) Write short note on: [18]

- a) Limitations of Bluetooth
- b) ATM Switch
- c) Hidden Station problem
