SEAT NO. :

T.E. 2008 (Computer Network Technology)

(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) **Neat diagrams must be drawn wherever necessary.**
3) **Figures to the right side indicate full marks.**
4) **Use of Calculator is allowed.**
5) **Assume Suitable data if necessary**

SECTION I

Q1)	a)	Discuss various network design issues	[6]
	b)	Explain token bucket algorithm	[6]
	c)	Explain different duties of network layer	[6]
		OR	
Q2)	a)	What is routing ? Explain Distance Vector Routing with suitable example	[10]
	b)	What do you mean by congestion? Explain any two congestion algorithms in virtual subnets	[8]
Q3)	a)	For a given C class network 195.188.65.0. Divide it into eight equal subnets. Find new subnet mask and range of first 6 subnets	[8]
	b)	Explain working of ICMP? Explain any four messages of ICMP	[8]
		OR	
Q4)	a)	Explain steps of lease allocation process in DHCP in detail	[8]
	b)	Explain different types of fragmentation in details with the help of fields used in IPV4 header format	[8]
Q5)	a)	Explain duties of transport layer and differentiate between connection-oriented and connection- less service	[8]
	b)	What is socket? Explain various socket primitives used in UDP	[8]
		OR	
Q6)	a)	Explain different timers used in TCP	[8]
	b)	Explain three way handshake algorithm for TCP connection establishment	[8]

		SECTION II	
Q7)	a)	Explain working of SNMP	[6]
	b)	Differentiate between POP3 and IMAP	[5]
	c)	Differentiate between FTP and TFTP	[5]
		OR	
Q8)	a)	What is FTP? Why it requires two ports? Explain at least five user commands used in FTP	[8]
	b)	Explain two types of messages used in HTTP	[8]
Q9)	a)	Explain in detail integrated service and differentiated services	[8]
	b)	Explain in detail any one protocol used for real time interactive application.	[8]
		OR	
Q 10)	a)	Explain any two algorithms for scheduling	[8]
	b)	Explain RSVP protocol. What is the need of this protocol?	[8]
Q 11)	a)	Explain architecture of Bluetooth	[9]
	b)	Explain Fast Ethernet in detail	[9]
		OR	
Q12)		Write short note on any three 1. Wireless LAN 2. ATM 3. Frame Relay 4. B-ISDN	[18]