SEAT No. :

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[5153]-95

T.E. (Information Technology)
COMPUTER NETWORK TECHNOLOGY
(2008 Course) (Semester - I) (314443)

Time : 3 Hours]   *[Max. Marks :100*
Instructions to the candidates:
1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6 in section - I Q7 or Q8, Q9 or Q10, Q11 or Q12.*
2) *Figures to the right indicate full marks.*

SECTION - I

Q1) a) What is routing? State different types of routing? Write properties of routing algorithm. **[8]**

b) Explain the parameters for quality of Service in Network Layer. **[8]**

OR

Q2) a) Compare virtual circuit subnet and datagram subnet. **[8]**

b) What do you mean by congestion? Discuss the open loop and closed loop congestion control mechanism. **[8]**

Q3) a) What is fragmentation? Explain types of fragmentation with example.**[8]**

b) List all special IP addresses. State the private IP addresses. **[8]**

OR

Q4) a) Is framentation supported by IPv4 and IPv6? Explain. **[8]**

b) What is ICMP? Explain the working of ICMP with suitable example.**[8]**

Q5) a) What is a Socket? Explain various socket primitives used in clinet-server interaction. **[8]**

b) How Nagle's algorithm helps in TCP transmission policy? Explain the clark's solution to overcome the silly window syndrome. **[10]**

OR

Q6) a) Explain the three way handshake algorithm for TCP connection establishment. **[10]**

b) Give the functions of four different timers used in TCP. **[8]**

SECTION - II

Q7) a) List the similarities and difference between POP3 and IMAP. **[8]**

b) Explain the MIB along with its structure. **[8]**

OR

Q8) a) List and describe seven message types in SNMP. **[8]**

b) Explain the terms - Managing Entity. Managed Device, Management Agents, MIB w.r.t. network management context. **[8]**

Q9) a) Explain Round Robin and Weighted Fair Queuing algorithm for scheduling. **[8]**

b) Explain the architecture of wireless application protocol. **[8]**

OR

Q10) a) What do you mean by integrated services? Explain with suitable example. **[8]**

b) Explain features and specification methods of Session Initiation Protocol. **[8]**

Q11) a) Discuss various layers used in ATM architecture. **[9]**

b) Explain Bluetooth architecture with diagram. **[9]**

OR

Q12) Write short note on: **[18]**

a) Limitations of Bluetooth.

b) ATM Protocol Stack.

c) Hidden Station problem.

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