Total No. of Questions : 12] SEAT No. :

P806 [Total No. of Pages : 2

[4659] - 219
B.E.(IT)
ADVANCED COMPUTER NETWORKS (Semester - II)
(2008 Pattern) (Elective - III(d))

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) State and explain logical layers of ISO/OSI model. **[8]**

b) Discuss evolution process of today's network from telephone network. **[8]**

OR

Q2) a) What are principles of communication network? Explain. **[8]**

b) Explain network architecture and functionality of each block in detail. **[8]**

Q3) a) State and explain various delays in ATM network. **[8]**

b) Why Network Address Translator is required in the network. **[8]**

OR

Q4) a) Explain the architecture of MPLS. **[6]**

b) Define Availability of network, MTBF, and MTTR. How "Availability" of network is calculated? **[10]**

Q5) Write short notes on: (any 3) **[18]**

a) ATM reference model

b) CIDR

c) Protocols of MPLS

d) Network Elements

P.T.O.

OR

Q6) a) Explain the need of IPv6 in todays world. **[8]**

b) Explain the significance of ATM Adaptation layer in detail. **[10]**

SECTION - II

Q7) a) How KEEPALIVE message is important in BGP? Explain. **[8]**

b) What is two-crossing problem in mobile IP routing? **[8]**

OR

Q8) a) What is label swapping in IP switching? **[8]**

b) Explain architecture of wireless network along with its application. **[8]**

Q9) a) Describe blocking probability in circuit switched network. **[8]**

b) Explain addressing formats in Mobile IP. **[8]**

OR

Q10) a) Explain in brief a protocol suit H.323 for IP telephony. **[10]**

b) Describe blocking probability in circuit switch network. **[6]**

Q11) a) Explain how autoconfiguration and renumbering in IPv6. **[8]**

b) Explain DSR protocol for adhoc networks. **[10]**

OR

Q12) Write short notes on: (any 3) **[18]**

a) VPN

b) MPLS

c) Addressing scheme in ATM networks

d) Traffic Engineering

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