

Total No. of Questions : 12]

SEAT No. :

**P1444**

[4759]-199

[Total No. of Pages : 2

**B.E.(I.T)**

**ADVANCED COMPUTER NETWORK  
(414450) (2008 Course) (Elective-III) (Semester-II)**

*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)** What are the network elements? Draw neat diagram of network architecture? **[8]**

b) State similarities and differentiate various wireless networks such as Bluetooth, Wi-Fi and Wi-Max. **[10]**

OR

**Q2) a)** How packets are transported in datagram and virtual circuit network? **[8]**

b) Explain ATM reference model and its protocol stack. **[10]**

**Q3) a)** Draw a neat diagram of ATM header? **[8]**

b) What is Network Address Translator? Explain in detail with example. **[8]**

OR

**Q4) a)** Explain mobility management issues in wireless networks. **[8]**

b) Explain addressing schemes in ATM networks? **[8]**

**Q5) a)** How dynamic routing optimization is carried out with different algorithm? **[8]**

b) Explain how "Availability of network" is calculated using MTBF and MTTR. **[8]**

OR

**P.T.O.**

- Q6)** a) Explain Markov chain model for circuit-switched network? [8]  
b) What are the parameters specified in quality of service? Explain in details? [8]

**SECTION-II**

- Q7)** a) Explain 5 different delays encountered by ATM cell with the help of figure. [8]  
b) Explain architecture of wireless network. State its applications. [10]

OR

- Q8)** a) What are VPN's? Explain the significance of Tunneling in VPN'S. [10]  
b) Explain how ATM network can transport IP packets. [8]

- Q9)** a) Explain in brief protocol suite, H.323 for IP telephony. [8]  
b) Explain blocking probability in circuit switch network. [8]

OR

- Q10)** a) Explain various features of IPV6? [8]  
b) Explain DSR protocol for Ad-hoc network. [8]

- Q11)** a) Explain the features of reactive and proactive routing protocols for MANET's. [8]  
b) Explain how firewall is implemented in the network. [8]

OR

- Q12)** a) Explain cluster based network architecture for ad- hoc networks. [8]  
b) Explain in detail PGP Protocol. [8]

