

Total No. of Questions : 10]

SEAT No. :

P2074

[Total No. of Pages : 2

[5059] - 680

**B.E. (Information Technology)**

**ADVANCED COMPUTER NETWORKS**

**(2012 Pattern) (Semester - II) (Elective - III)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Figures to the right indicate full marks.*
- 3) *Assume Suitable data if necessary.*

- Q1) a) Describe architecture of WiMAX. [6]**  
b) What are different network elements? [4]

OR

- Q2) a) What are ATM traffic descriptor? Explain. [6]**  
b) What is Network address translation? [4]

- Q3) a) Draw header structure of ATM cell at U-N interface. [6]**  
b) What is multiprotocol label switching? [4]

OR

- Q4) a) Describe in detail VoIP. [6]**  
b) What is multirate circuit switching? [4]

- Q5) a) What do you mean by lossless compression? State different lossless compression techniques. Explain any one detail. [10]**  
b) Describe various components of TCP congestion control? [8]

OR

**P.T.O.**

- Q6)** a) What are different strategies to avoid congestion? Explain any one in detail. [10]  
b) Define QoS? How RSVP supports to improve the overall QoS of network? [8]
- Q7)** a) Explain characteristics of Mobile IP. [8]  
b) What is MPLS? Explain the operations of MPLS in detail. [8]

OR

- Q8)** a) What is GMPLS? Where it is used? Justify your answer. [8]  
b) Discuss the challenges of traffic engineering in IP/MPLS network. [8]
- Q9)** a) Explain basic architectural stack of IEEE 802.16. [8]  
b) Explain Cluster-Based wireless networks. [8]

- Q10)** a) Describe high rate and low rate WPAN. [8]  
b) Explain in detail MAC implementation of IEEE 802.16. [8]

