[5154]-710

B.E. (Information Technology)
ADVANCED COMPUTER NETWORKS (Elective - III)
(2012 Pattern) (Semester - II) (End Sem.) (414463E)

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 network architecture of ISO/OSI model. **[6]**

     b)   What are different network elements? **[4]**

<p align="center">OR</p>

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 EIGRP? Explain in brief. **[4]**

<p align="center">OR</p>

Q4) a)   Describe internet working in ATM. **[6]**

     b)   List various ISDN services? **[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]**

<p align="center">OR</p>

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 routing protocol to support QoS.   **[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]**

                                    OR

*Q10)*a)   Describe high rate and low rate WPAN.   **[8]**

    b)   Explain in detail MAC implementation of IEEE 802.16.   **[8]**

◆ ◆ ◆