T.E (comp) VI Rev. 29/5/13
Advance Computer N/w.

AGJ 1st half (f+) 4

Con. 9723-13. **GS–1219**

(3 Hours) **[Total Marks : 100**

N.B. : (1) Answer any **five** questions out of **seven**.
(2) **Each** question carries **equal** marks.

1. (a) Explain ATM Adaptation layer giving details of different classes of traffic. **10**
   (b) Explain X·25 protocol stack, detailing operation of X·25/3 (Network layer). **10**

2. (a) What are the advantages of MPLS compared to IP over ATM ? Explain MPLS switching using level stacking. **10**
   (b) Explain SNMP MIB structure by giving example. Also explain different types of messages exchanged. **10**

3. (a) Explain how reservation in the Intserv model is carried out using RSVP protocol. What are different RSVP messages sent ? **10**
   (b) Explain the operating principle of DWDM technology. **10**

4. (a) What are the requirements of a Backbone Network Design ? **10**
   (b) What is the role of subnet mask in classless as well as classbase IP routing ? Explain with the help of examples. **10**

5. (a) How traffic characteristics affect the network design while doing capacity planning ? **10**
   (b) Explain why unicasting routing protocols are not used for multicasting. Explain any one multicasting routing protocol in detail. **10**

6. (a) Write a connection oriented socket program for client server communication in either C++ or Java. **10**
   (b) Compare and contrast IP V4 with IPV6. **10**

7. Short note on any **four** :– **20**
   (a) H. 323
   (b) SONET/SDH
   (c) M/M/1 Queuing theory
   (d) BGP
   (d) B-ISDN reference model.
