(3 Hours)   [Total Marks: 80]

N.B. (1) Question no. 1 is compulsory.

   (2) Attempt any three from remaining five questions.

   (3) Figures to the right indicate full marks.

   (4) Assume suitable data whenever required and justify them.

Q.1 (a) Explain IP Address and Allocation Technique.   (10)

   (b) Explain OSPF protocol.   (10)

Q.2 (a) Explain protocol stack architecture.   (10)

   (b) Differentiate between RIPv1 and RIPv2.   (10)

Q.3 (a) Explain architecture view of internet.   (10)

   (b) What are the characteristics of network algorithms?   (10)

Q.4 (a) Explain in detail of router architecture.   (10)

   (b) Explain IP packet filtering and classification.   (10)

Q.5 (a) Explain a general framework for source based QoS routing.   (10)

   (b) Explain VPN traffic engineering.   (10)

Q.6 (a) What are the QoS attributes? Explain it.   (10)

   (b) Explain traffic engineering of IP/MPLS networks.   (10)