



Q. P. Code : 13295

(3 Hours)

(Total Marks: 80

N.B. :

- (a) Question No.1 is compulsory.
- (b) Total 4 questions need to be solved.
- (c) Attempt any three questions from remaining five questions.
- (d) Assume suitable data wherever necessary, justify the same.

- 1.a What are the roles of sub layer of data link layer? [4]
- 1.b Define i) Load ii) Throughput How it will impact on network? [4]
- 1.c Explain Connection oriented protocol with example. [4]
- 1.d Explain the working principle of MPLS. [4]
- 1.e List the features of Link State Routing. [4]

- 2.a What are the roles of two level and three level switch? Justify router as an Intelligent device. [8]
- 2.b Compare between IPv4 to IPv6. Explain the concept of tunneling. [6]
- 2.c Derive the expression of efficiency of slotted ALOHA. [6]

- 3.a List the exclusive features of TDM. [4]
- 3.b Explain in detail the networking topologies and explain which is practically preferred. [8]
- 3.c List the use of Multiple Access Techniques and Explain the CSMA/CD. [8]

- 4.a BGP is Exterior Routing Protocols explain with working principle. [8]
- 4.b Define: i) Unicast ii) Any cast ii) Multicast. Explain with a suitable example. [8]
- 4.c Discuss the working Principle of Satellite Network. [4]

- 5.a What do you mean by Peer to Peer communication? Explain with respective protocol. [8]
- 5.b Compare between TCP and UDP and explain the UDP multiplexing and demultiplexing. [8]
- 5.c Explain the concept Network Socket Programming. [4]

- 6 Write short notes on any two : [20]
 - (a) WiMAX
 - (b) Physical media
 - (c) DNS