Note : Answer **any six** questions from Part – **A** and **any one full**
question from **each** Unit in Part – **B**.

PART – A

1. a) Define computer network.   (6×2=12)

   b) What is unicasting and broadcasting ?

   c) What is meant by guided media ?

   d) What is digital modulation ?

   e) What is multicast routing ?

   f) What is meant by subnetting and subnets ?

   g) List the two main protocol in transport layer.

   h) Expand SMTP, MIME.

PART – B

Unit – I

2. a) Explain in brief different layers of OSI reference model.

   b) Differentiate connection oriented and connectionless service.   (6+6)

3. a) Explain in brief different layers of TCP/IP reference model.

   b) Write a note on the following (i) Mobile users (ii) Social issues.   (6+6)

Unit – II

4. a) Write a note on (i) Coaxial cable (ii) Fiber optics.

   b) Explain the different types of switching techniques. (6+6)

5. a) With a neat diagram explain Time Division Multiplexing.

   b) Explain any two popular techniques for error detection. (6+6)

Unit – III

6. a) Explain store and forward packet switching.

   b) With a neat diagram explain the format of IP version 6 protocol. (6+6)

7. a) What is congestion ? List and explain the approaches to congestion control.

   b) With a neat diagram explain classful addressing.

   c) Explain the types of OSPF messages. (4+4+4)

Unit – IV

8. a) List and explain the built-in HTTP request methods.

   b) Write a short note on Domain Name system.

   c) Explain the process of TCP Sliding window. (4+4+4)

9. a) With a neat diagram explain the architecture of Email system.

   b) Explain the technique of Remote Procedure Call. (6+6)

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