

PMM/KS/15 - 7093

Sixth Semester B. E. Computer Technology  
(C. B. S.) Examination

COMPUTER NETWORKS

Time : Three Hours ]

[ Max. Marks : 80

- N. B. :
- (1) All questions carry marks as indicated.
  - (2) Solve Question 1 OR Question No. 2.
  - (3) Solve Question 3 OR Question No. 4.
  - (4) Solve Question 5 OR Question No. 6.
  - (5) Solve Question 7 OR Question No. 8.
  - (6) Solve Question 9 OR Question No. 10.
  - (7) Solve Question 11 OR Question No. 12.
  - (8) Due credit will be given to neatness and adequate dimensions.
  - (9) Illustrate your answers wherever necessary with the help of neat sketches.

1. (a) Write down about any five Computer Networking Components. Also describe their relation with layer of TCP/IP model. 7
- (b) What do you mean by Line Coding ? What are the advantages of using different Line Codes ? Explain any three line coding techniques with diagram. 7

OR

2. (a) Explain the working and classifications of fiber optic transmission media. 7
- (b) What is RS 232 ? Explain 9 pin RS 232 diagrammatically. 7

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Contd.

3. (a) Explain Hamming code by taking one example. 7  
(b) Explain the concept of "Go back - N". 7

OR

4. (a) Explain CSMA / CD protocol. 7  
(b) Discuss any limited contention protocol by giving diagrammatic representation. 7

5. (a) What do you mean by datagram ? Explain the working of datagram by taking suitable example. 7  
(b) Discuss the problems associated with Distance vector routing in detail. 6

OR

6. (a) Write down about classful and classless IP addressing with examples. 7  
(b) Write down the steps to create 4 LANs by using the concept of subnetting. 4  
(c) List down any four functions of a Router. 2

7. (a) What is socket ? What are its components ? Explain its use. 7  
(b) Write short notes about TCP. 6

OR

8. (a) Explain the role and responsibilities of transport layer. 5

(b) Explain the multiplexing and demultiplexing concept of transport layer with suitable diagram.

8

9. (a) Write short notes and working of SNMP. 7

(b) Explain the types and working of firewalls. 6

**OR**

10. (a) Explain the working of DNS with diagram. 7

(b) Discuss authentication and their ways. 6

11. (a) What is ISDN ? Discuss the types of services provided by ISDN. 6

(b) Explain the concept and working of VLAN. 7

**OR**

12. (a) Write down frame format of IEEE 802-11 and explain its components. 8

(b) Write down about cellular telephony. 5