**III Semester B.C.A. Degree Examination, April/May 2023**
**(NEP Scheme)**
**COMPUTER APPLICATION**
**DSC9 : Computer Communication and Networks**

Time : 2½ Hours

Max. Marks : 60

*Instruction :* *Answer **all** the Sections.*

## SECTION – A

I. Answer **any six** questions. **Each** question carries **two** marks.                      (6×2=12)

1) Define Computer Networks.

2) What is MAN ?

3) Define Message Switching.

4) What is multiplexing ?

5) What is byte stuffing ?

6) Mention the design issues of data link layer.

7) What is hierarchical routing ?

8) Define protocol.

9) Mention the services provided to Transport layer.

## SECTION – B

II. Answer **any four** questions. **Each** question carries **six** marks.                      (4×6=24)

10) Explain the OSI reference model.

11) Compare LAN, WAN and MAN.

12) Explain the following :
    i) Twisted pair
    ii) Coaxial cable.

13) Explain Checksum with an example.

14) Explain token bucket algorithm.

15) Write a note on internet transport protocol.

### SECTION – C

III. Answer **any three** questions. **Each** question carries **8** marks.                    (3×8=24)

16) Explain any four topologies with neat diagram.                    8

17) Write a note on switching.                    8

18) a) Write a note on CRC.                    4
    b) Explain Hamming code with an example.                    4

19) Write a note on distance vector routing with an example.                    8

20) a) Write a note on Electronic Mailing.                    4
    b) Write a note on WWW.                    4

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