

**2024/TDC (CBCS)/EVEN/SEM/
BVOCGEC-203T/399**

TDC (CBCS) Even Semester Exam., 2024

**Bachelor of Vocational Course
(Information Technology)**

(2nd Semester)

Course No. : BVOCGEC-203T

(Computer Network)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

**Answer four questions, choosing one
from each Unit**

UNIT—I

1. (a) Explain the relationship between speed and frequency. 5
- (b) Write a short note on transmission media. 6

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- (c) Briefly explain the following networking protocols: (any two) : 6

(i) TCP

(ii) IP

(iii) ARP (Address Resolution Protocol)

2. (a) Explain polar and bipolar line coding schemes with example. 12

- (b) Differentiate baseband and broadband transmissions. 5

UNIT—II

3. (a) What do you mean by datagram network? Explain. 7

- (b) Write short notes on the following : 10

(i) Virtual Circuit Identifier (VCI)

(ii) Routing table

4. (a) Describe the structure of a packet switch network. 8

- (b) Define DSL technology. Briefly explain discrete multitone technique for modulation. 5

- (c) Distinguish between CM and CMTS. 4

24J/1002

(Continued)

(3)
(4)

UNIT—III

5. (a) Define the following : 8

(i) Hub

(ii) Bridge

(iii) Router

(iv) Gateway

- (b) Discuss the process of error detection and correction using block coding with example. 10

6. (a) Distinguish between error detection and error correction. 4

- (b) Define Point-to-Point Protocol (PPP). What are the services provided by PPP? 2+3=5

- (c) Explain different transition phases of PPP protocol. 9

UNIT—IV

7. (a) Explain classfull IP addressing and define the application of each class of classfull addressing. 14

- (b) Define the following : 4

(i) Supernetting

(ii) Subnetting

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(Turn Over)
LPS

(4)

8. (a) Define DNS. What are the two main categories of DNS message? Explain.

4+4=8

- (b) Write short notes on the following : $4 \times 2 = 8$

(i) HTTP

(ii) FTP

- (c) Distinguish between primary server and secondary server.

2
