**2022/TDC(CBCS)/EVEN/SEM/
BVOCGE-203T/369**

TDC (CBCS) Even Semester Exam., 2022

BVOC (INFORMATION TECHNOLOGY)

(2nd Semester)

Course No. : BVOCGE-203T

(**Computer Networks**)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

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

SECTION—A

Answer any *two* questions :

1. *(a)* Explain the relationship between speed and frequency.   5

   (b) Write a short note on transmission media.   6

   (c) Briefly explain the following networking protocols :   6

        (i) TCP

        (ii) IP

        (iii) ARP

         (*Turn Over*)

2. (a) Explain polar and bi-polar line coding scheme with example. 12

   (b) Differentiate between baseband and broadband transmissions. 5

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

   (b) Write short notes on the following : 5×2=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 multi-one technique for modulation. 5

   (c) Distinguish between CM and CMTS. 4

SECTION—B

Answer any *two* questions :

5. (a) Define block coding. Describe the process of error correcting using block coding. 2+6=8

   (b) Define the following : 2×5=10
   (i) Hub
   (ii) Switch
   (iii) Bridge
   (iv) Router
   (v) Gateway

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

   (b) Define PPP. What are the services provided by PPP? Explain different transmission phases of PPP protocol. 2+3+9=14

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

   (b) Define the following : 2×2=4
   (i) Supernetting
   (ii) Subnetting

8. (a) Define DNS. What are the two main categories of DNS message? Explain. 4+4=8

   (b) Write short notes on the following : 4×2=8
   (i) HTTP
   (ii) FTP

   (c) State the differences between primary server and secondary server. 2

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