

**2018**

**TDC Even Semester Exam, 2018**

**BVOC (IT)**

**(Honours)**

**2nd Semester**

**(Practical)**

**Paper No. : BVO-SC-202**

***(Practical on Computer Networking)***

Full Marks : 70

Pass Marks : 28

**Time : 2 hours**

**PART-I**

**Answer any four questions.**

1. Write a program to implement Redundancy Check (CRC) error detection algorithm for noisy channel. 10
- ~~2.~~ Write a program to implement stop and wait protocol for noisy channel. 10
- ~~3.~~ Write a program to implement go back n sliding window protocol. 10
4. Write a program to implement selective repeat sliding window protocol. 10
5. Write a program to implement Dijkstra algorithm for shortest path routing. 10
- ~~6.~~ Write a program that prints all the addresses of [www.youtube.com](http://www.youtube.com). 10

## CENTRAL LIBRARY N.C.COLLEGE

7. Write a program to testing the characteristics of an IP address i.e. you have to check whether given address is Any Local Address, Loopback Address, Link Local Address, Site Local Address or Multicast Address. 10

8. Write a program to implement distance vector routing algorithm. 10

### PART-II

9. Laboratory notebook. 10

10. Viva Voce. 20

\*\*\*\*\*

2018

TDC Even Semester Exam, 2018

BVOC (IT)

(Honours)

2nd Semester

(Practical)

Paper No. : BVO-SC-201

(Lab- Programming in C)

Full Marks : 70

Pass Marks : 28

Time : 2 hours

PART-I

Answer any **four** questions from each group.

GROUP-A

1. Write a program to find the sum of a natural nos. 10
2. Write a program to compute the factors of a given no. 10
3. Write a program to compute the sum of the first term of the following series : 10  
$$S = 1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{n}$$
4. Write a program to find the factorial for a given no. 10
5. Write a program to read the principal, rate of interest and the number of years and find the simple interest using the formula, simple interest =  $\frac{PNR}{100}$ . 10

Turn Over

# CENTRAL LIBRARY N.C.COLLEGE

## GROUP-B

6. Write a program to sort n-elements in an array. 10
7. Write a program to calculate and print the sum and average of the elements of array. 10
8. Write a program that swaps two numbers using pointers. 10
9. Write a program to create a file and store information in to the file. 10
10. Write a function that checks whether a given string is palindrome or not. Use this function to find whether the string entered by user is palindrome or not. 10

## PART-II

11. Laboratory Note Book. 10
12. Viva Voce. 20

\*\*\*\*\*

## TDC Even Semester Examination-2018

## B-VOC

(2nd Semester)

Course No: BVOC-GE-201

(English-II)

Full Marks: 70Pass Marks: 28

Time: 3 hours

*The figures in the margin indicate full marks for the question*  
Answer all the questions.

UNIT-I

1. (a) Write a detailed note on the parts of speech in English with suitable examples. 10
- Or
- (b) Write a note on the tenses in English with illustrative. 10
2. (a) Write a short note on the distinctions between phrases and clauses in English. 7
- Or
- (b) Briefly discuss the use of articles in English. 7

UNIT-II

3. (a) Give a synonym for each of the following words:  
Idea, husband, funny, govern, difficult, ill, real spirit, correct, friend. 10
- Or
- (b) Point out the difference in meaning between the following paired words: 5x2=10  
altar – alter, accent – assent, complement- compliment, council – counsel, loose- lose.

# CENTRAL LIBRARY N.C.COLLEGE

4. (a) Write a note on how adjectives are formed in English. 8
- Or
- (b) Mention eight words related to school and workplace. 8

## UNIT-III

5. (a) Write a summary of the following paragraph: 10
- The family, like the home in which it lives, needs to be kept in repair, lest some little rift in the walls should appear and let in the wind and the rain. The happiness of a family depends upon attention to little things; order, comfort, regularity, cheerfulness, good taste, pleasant conversation – these are the ornaments of daily life deprived of which it degenerates into a wearisome routine. There must be light in the dwelling and brightness and pure spirits and cheerful smiles. Home is not usually the place of toil, but the place to which we return and rest from our labours, in which parents and children meet together pass a careless and joyful hour. To say nothing to others at such time in any rank of life is a very unfortunate temper of mind, and may perhaps be regarded as a fault at any rate it makes a house vacant and joyless.
- Or
- (b) Prepare a CV for the job of a college teacher. 10
6. (a) Prepare a draft notice to a tenant for immediate payment of his rent which is overdue. 8
- Or
- (b) Prepare an imaginary conversation between two person in a bus stand. 8

## UNIT-IV

7. (a) Write an illustrative note on pair and ground activities. 10
- Or
- (b) Outline the basic features of communication. 10
8. (a) Exemplify some classroom activity. 7
- Or
- (b) Exemplify some communication in real life. 7

\*\*\*\*

TDC Even Semester Exam., 2018

BVOC (INFORMATION TECHNOLOGY)

( 2nd Semester )

Course No. : BVO-GE 202

( Programing in C )

Full Marks : 70

Pass Marks : 28

Time : 2 hours

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

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

UNIT—I

1. ✓ (a) What do you mean by procedural programming? Write down advantages of procedural programming language. 2+5=7
- ✓ (b) Fill in the blanks : 1×5=5
- (i) The Father of C language is \_\_\_\_\_.
  - (ii) C variable name starts with a \_\_\_\_\_.
  - (iii) The loop that executes at least once is \_\_\_\_\_.



( 2 )

(iv) C programs are converted into machine language with the help of \_\_\_\_.

(v) The size of the float data type is \_\_\_\_.

✓(c) What is the importance of keywords in C? Explain with examples. 5

2. (a) What are variable and constant? Briefly explain different types of variable and constant used in C. 7

(b) Explain the structure of 'do-while' loop with the help of flowchart and one example. 7

(c) Define the following : 1×3=3

(i) nested if

(ii) break

(iii) goto

## UNIT—II

3. ✓(a) What is an array? How can array be declared and instantiated? Explain with example. 2+3=5

(b) How can string be represented using array? Write a C program to read and print a string. 3+5=8

✓(c) What is null character? Why is it used? Give example. 4

( 3 )

4. (a) Consider the following declaration  
int table [2][3]={0, 0, 0, 1, 1, 1}.  
Explain the line of code. 4

(b) Why is 2-D array used? Justify your answer with one suitable example. 6

(c) Write a C program to add two 2×3 matrices. 7

## UNIT—III

✓5. (a) What do you mean by function prototype declaration? Explain with example. 5

✓(b) Write down the uses of the following : 1×7=7

(i) print()

(ii) scanf()

(iii) getch()

(iv) clrscr()

(v) gets

(vi) pow()

(vii) strlen()

✓(c) Write a function to swap two numbers. 6

✓6. (a) When is the return statement mandatory in a function? Explain with example. 5



( 4 )

- (b) What is the meaning of the following declarations? 6
- (i) `int f (float, double, char);`
  - (ii) `void g (int a, int b);`
  - (iii) `double h (void);`
- (c) What is recursion? Write down the advantages of recursion. Distinguish between recursion and iteration.  $2+3+2=7$

## UNIT—IV

7. (a) What is structure? How is a structure different from an array? 5
- (b) Define union. Explain it with the help of an example. State the differences between structure and union.  $2+3+3=8$
- (c) Write a code to show how one structure can be nested within another structure. 5
8. (a) What is a file? Why is a file called an external data structure?  $2+2=4$
- (b) Mention the differences between the operations of the following :  $2+2=4$
- (i) `fwrite` and `fprintf`
  - (ii) `fread` and `fscanf`

( 5 )

- (c) Write a C program to read and print a data file. 6
- (d) What is the purpose of `fopen()`? What are the different file opening modes in C?  $1+3=4$

\*\*\*

**2018/EVEN/SEM/BVOC-203/295**

**TDC Even Semester Exam., 2018**

**BVOC**

**( Information Technology )**

**( 2nd Semester )**

**Course No. : BVOC-GE-203**

**( Computer Networks )**

**Full Marks : 70**

**Pass Marks : 28**

**Time : 3 hours**

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

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

**UNIT—I**

1. (a) What is data communication system?  
Identify the five components of data  
communication system. 2+3=5
- (b) What is the difference between the  
following? 2½×2=5
  - (i) Analog signal and Digital signal
  - (ii) Half-duplex and Full-duplex  
transmission modes.



( 2 )

- (c) What is the topology of network?  
Explain briefly the categories of topology.  $2+5=7$

2. (a) Explain the OSI reference model in detail. 7  
(b) Explain the difference between serial and parallel data transmissions. 7  
(c) What do you mean by data rate limits? 3

## UNIT—II

3. (a) What is switching? What are the two popular switching techniques? Explain with their advantages and disadvantages.  $1+1+8=10$

- (b) Explain briefly the uses of cable TV for data transmission. 7

4. (a) What is DSL technology? What are the services provided by the telephone companies using DSL? Distinguish between a DSL model and a DSLAM. 10

- (b) Explain briefly on the following :  $1+2+2+2=7$

- (i) Transmission medium  
(ii) Twisted-pair cable  
(iii) Co-axial cable  
(iv) Fibre-optic cable

( 3 )

## UNIT—III

5. (a) What is error detection? How does error correction differ from error detection? Explain the different types of error detection techniques.  $1+2+6=9$

- (b) What are the three protocols for noisy channel? 9

6. (a) Define the following :  $3 \times 3 = 9$

- (i) Pure ALOHA  
(ii) Slotted ALOHA  
(iii) Ethernet LAN

- (b) Define repeater, hub, switch, bridge, router and gateway. 9

## UNIT—IV

7. (a) What do you mean by IP addressing? Explain classfull IP addressing and its different types.  $2+3+4=9$

- (b) What is routing algorithm? Explain distance vector and link state routing algorithm.  $1+8=9$

8. (a) Explain IPv4 protocol with example. 9

- (b) Write short notes on the following :  $3 \times 3 = 9$   
(i) DNS protocol  
(ii) HTTP  
(iii) FTP

★ ★ ★