

**2022/TDC(CBCS)/EVEN/SEM/  
BVOCGE-202T/368**

**TDC (CBCS) Even Semester Exam., 2022**

**BVOC (INFORMATION TECHNOLOGY)**

**( 2nd Semester )**

**Course No. : BVOCGE-202T**

**( Programming in C )**

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) Write short notes on the following with examples :** **2×4=8**

**(i) Identifiers**

**(ii) Keywords**

**(iii) Constants**

**(iv) Variables**

( 2 )

- (b) Write the syntax of defining and initializing a variable. Explain the scope of variables.  $4+5=9$

2. (a) What is C operator? Explain arithmetic, logical and bitwise operators with examples.  $1+10=11$

- (b) Define C standard library function with example. Write the advantages of using C standard library function.  $1+3=4$

- (c) Why are we using "stdio.h" and "conio.h" basic header files in writing C program? 2

3. (a) What is an array? Write the syntax for declaring and initializing an array with example.  $1+5=6$

- (b) What do you mean by two-dimensional array? Define and initialize a two-dimensional array.  $2+4=6$

- (c) Write a program to print all the elements of an array. 5

4. (a) How can we manipulate array elements in C using for loop? Write a C program for implementing addition of two vectors. 14

( 3 )

- (b) Write short notes on the following array data types with example :  $1 \times 3 = 3$

(i) Integer

(ii) Float

(iii) Character

### SECTION—B

Answer any two questions :

5. (a) What is function in C? Write the general form of defining a function in C programming language with description of all parts of a function.  $2+6=8$

- (b) In how many ways we can pass an argument while calling a function? Explain with example.  $2+8=10$

6. (a) Explain C function arguments and return value. 10

- (b) What is pointer in C? Declare and initialize a pointer in C with example.  $2+6=8$

7. (a) What is structure in C? Write the syntax for defining a structure with example.  $2+6=8$

( 4 )

(b) Explain the following with example :

$$5 \times 2 = 10$$

(i) Accessing structure members

(ii) Pointers to structure

8. How to open and close a data file in C? Write a C program to open a file, write in it and close the file.

$$6 + 12 = 18$$

★ ★ ★