

--	--	--	--	--	--	--	--	--	--



GIET UNIVERSITY, GUNUPUR – 765022
B. C. A (First Semester) Examinations, April – 2021
BCA20103 – C Programming

Time: 3hrs

Maximum: 70 Marks

The figures in the right hand margin indicate marks.

PART – A: (Multiple Choice Questions)**(1 x 10 = 10 Marks)****Q. 1 Answer ALL questions**

- a. What is a graphical representation of steps in sequential order used in presenting workflow or processes?
(i) Algorithm (ii) Code
(iii) flowchart (iv) Syntax
- b. Which of the following is a valid Keyword in C?
(i) List (ii) Auto
(iii) print (iv) Dict
- c. Choose the valid statement of for loop from the following.
(i) for(j= =0 ; j<=10 ; j++) (ii))for(j=0 , j++ , j<10)
(iii) for(j=0 , j<10 , j++) (iv) for(j=0 ; j<10 ; j++)
- d. A function that calls itself repeatedly itself until a condition is satisfied is called as _____.
(i) Looping function (ii) Recursive function
(iii) Calling function (iv) Switch functions
- e. What is the last character stored by a String data type?
(i) \n (ii) \t
(iii) \\ (iv) \0
- f. Choose the looping statement from the following.
(i) While (i) if
(iii) switch (iii) Goto
- g. The data type allows to store different data types in the same memory location are called _____.
(i) Structure (ii) Array
(iii) Union (iv) String
- h. Choose the valid variable declaration from the following.
(i) int 12_name; (ii) int _name12;
(iii) int @name; (iv) int name@;
- i. What the compiler does on executing the code fopen("test.txt", "w+");?
(i) Opens the file test.txt in reading mode (ii) Opens the file test.txt in Writing mode
(iii) Opens the file test.txt in reading and Writing mode (iv) Opens the file test.txt in reading , Writing mode and appending mode
- j. What is the default return type of main function?
(i) null (ii) \0
(iii) Char (iv) int

PART – B: (Short Answer Questions)

(2 x 10 = 20 Marks)

Q.2. Answer **ALL** questions

- a. How do you define a variable in C?
- b. What is mean by Algorithm?
- c. What is an array? Write an with example of an array.
- d. What is a function in C? State one use of Function.
- e. How would you define a pointer to pointers?
- f. Write the syntax for declaring unions with example.
- g. Define Structure in C with example.
- h. List the methods used in C to handle file operations.
- i. What is pre-processor in C ?
- j. Write a program to add two numbers in C using function.

PART – C: (Long Answer Questions)

(10 x 4 = 40 Marks)

Answer **ALL** questions

- 3.a. Illustrate the concept of keyword in C? (5 Marks)
- b. Explain briefly about any four data types in C. (5 Marks)

(OR)

- c. What is the use of bitwise and arithmetic operator in C? (5 Marks)
- d. Write a program to check if the given number is positive. (5 Marks)
- 4.a. Describe in short about the String in C. (5 Marks)
- b. Write a program to find the length of a given String. (5 Marks)

(OR)

- c. What is a recursive function? (5 Marks)
- d. List the types of arguments taken by the Function. (5 Marks)
- 5.a. Differentiate between Structures and Unions in C? (5 Marks)
- b. Discuss briefly about pointers in C. (5 Marks)

(OR)

- c. What is an Enumeration in C? Explain briefly with example. (5 Marks)
- d. Explain how to access the members of structure with example. (5 Marks)
- 6.a. Summarize about the function related to file handling. (5 Marks)
- b. Write a program to open a file for reading and displaying the contents of the file. (5 Marks)

(OR)

- c. How c handles memory management? (5 Marks)
- d. Discuss in detail about the error handling mechanism in C. (5 Marks)

--- End of Paper ---