

Roll No. :

Total No. of Pages : 4

BCA103

BCA FIRST YEAR EXAMINATION, 2023

**PROBLEM SOLVING THROUGH C
PROGRAMMING**

(Paper - III)

Time Allowed : Three Hours

Maximum Marks : 100

PART-A

[Marks : 20]

Note: Answer **all** questions (50 words each). All questions carry equal marks.

PART-B

[Marks : 50]

Note: Answer **five** questions (250 words each). Selecting **one** from each unit. All questions carry equal marks.

PART-C

[Marks : 30]

Note: Answer **any two** questions (300 words each). All questions carry equal marks.

PART-A

1. Answer the following questions :

BCA103

(1)

P.T.O.

- (i) What is an Algorithm ?
- (ii) Define Runtime Error.
- (iii) What is a Token ?
- (iv) Define Constant.
- (v) Define Continue Statement.
- (vi) What is mean by Nested Loops ?
- (vii) Define Functions.
- (viii) What is a function Prototype ?
- (ix) What is an Array ?
- (x) Define Structures. [10x2=20]

PART-B

UNIT-I

2. Discuss various types of Errors. [10]

OR

3. What is a Flow Chart ? Discuss the various symbols used in Flow Chart. [10]

UNIT-II

4. Discuss various Operators in C. [10]

OR

5. Explain various Data types in C. [10]

UNIT-III

6. (a) Write a C program to arrange the elements of an Array in ascending order. [5]

- (b) Discuss the Switch case statement with example. [5]

OR

7. Differentiate between While and Do-while statement with examples. [10]

UNIT-IV

8. Discuss the various types of functions based on Parameters Passing with examples. [10]

OR

9. Write short notes on the following : [5+5=10]

- (i) Call by Value and Call by Reference

(ii) Passing Arrays to functions

UNIT-V

10. Discuss the various Storage classes. [10]

OR

11. What is Structure ? Discuss the array of structure with examples. [10]

PART-C

12. (a) Discuss the properties of Algorithms. [7]

(b) Draw a flow chart for finding the sum of digits of a given non-negative integer number. [8]

13. Discuss the basics of C language and Structure of C program. [15]

14. Discuss the Loop Control Structures in C with examples. [15]

15. Write a C program to multiply two matrices. [15]

16. Discuss the various options of File Handling in C. [15]

---X---