

C 43145

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Name.....

Reg. No.....

**SECOND SEMESTER (CBCSS—UG) DEGREE EXAMINATION  
APRIL 2023**

B.C.A.

BCA 2B 02—PROBLEM SOLVING USING C

(2019—2022 Admissions)

Time : Two Hours

Maximum : 60 Marks

**Section A (Short Answer Type Questions)***Answer all questions.**Each question carries 2 marks.**Ceiling 20 marks.*

1. What are the fundamental data types in C ?
2. What are the basic types of C constants ?
3. What do you mean by pre increment and post increment operators in C ?
4. What are the different arithmetic operators in C ?
5. Explain any *four* I/O functions in C ?
6. Explain the syntax and function of **if..else** construct.
7. Explain the use of **break** statement in C.
8. How will you declare a user defined function in C ?
9. Explain how string are defined in C ?
10. What is union variable in C ?
11. Explain \* operator and & operator with example.
12. What is the use of **realloc()** function in C ?

**Turn over**

**Section B (Short Essay Type Questions)**

*Answer all questions.*

*Each question carries 5 marks.*

*Ceiling 30 marks.*

13. Explain about C program development environment.
14. Give an account on relational and assignment operators in C.
15. Compare and contrast **for** and **while** loop construct in C.
16. Write a C program to find the sum and reverse of a number.
17. What is Recursion ? Give a suitable example.
18. Compare and contrast Pointer to array and Pointer to structure.
19. What are command line arguments ? Explain with an example.

**Section C (Essay Type Questions)**

*Answer any one question.*

*The question carries 10 marks.*

20. Explain the syntax and functions of different dynamic memory allocation functions available in C.
21. Write a C program to print the binary equivalent of a decimal number using a user-defined function called **ToBin()**.

(1 × 10 = 10 marks)