C 43145	(Pages: 2)	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

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Section B (Short Essay Type Questions)

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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()**.

 $(1 \times 10 = 10 \text{ marks})$