Reg. No. : ....

Name : ....

I Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, November 2023
(2019 Admission Onwards)
Core Course in Computer Science
1B01CSC : INTRODUCTION TO C PROGRAMMING

Time : 3 Hours

Max. Marks : 40

PART – A
(Short Answer)

Answer **all** questions.

(6×1=6)

1. Define the term "Algorithm".

2. What is the purpose of a flowchart in programming ?

3. Name any three C tokens.

4. Explain the importance of the "if-else" statement in decision-making.

5. What is the significance of the "break" statement in loops ?

6. Define the term "data type" in the context of C programming.

PART – B
(Short Essay)

Answer **any 6** questions.

(6×2=12)

7. Briefly explain the steps involved in the program development cycle.

8. Differentiate between source code, object code and an executable file.

9. How is type conversion handled in C expressions ? Provide an example.

10. Discuss the role of the "switch" statement in C with an example.

P.T.O.

11. Write a C code snippet to declare an array of integers and initialize it with values {1, 2, 3, 4, 5}.

12. Explain the concept of "nested loops" with a practical example.

13. Discuss the significance of the "do-while" loop in C programming.

14. What are the special operators in C and how are they used in programming ?

PART – C
(Essay)

Answer **any 4** questions.

(4×3=12

15. Develop an algorithm to find the sum of elements in a one-dimensional array.

16. Explain the process of formatted input in C programming.

17. Discuss the role of bitwise operators in C with suitable examples.

18. Describe the steps involved in reading a character from the keyboard in C.

19. Develop a flowchart for a program that calculates the factorial of a given number.

20. Differentiate between "while" and "for" loops in C with examples.

PART – D
(Long Essay)

Answer **any 2** questions.

(2×5=10)

21. Write a C program to check whether a given number is prime or not.

22. Develop an algorithm and corresponding C code for matrix multiplication.

23. Discuss the benefits and limitations of using flowcharts in program development.

24. Explain the concept of multidimensional arrays in C. Provide an example of a two-dimensional array and its initialization.

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