

C 4351

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Name.....

Reg. No.....

## SECOND SEMESTER (CBCSS—UG) DEGREE EXAMINATION, APRIL 2021

B.C.A.

BCA 2B 02—PROBLEM SOLVING USING C

Time : Two Hours

Maximum : 60 Marks

**Section A (Short Answer Type Questions)***Answer at least **eight** questions.**Each question carries 3 marks.**All questions can be attended.**Overall Ceiling 24.*

1. What are identifiers ? How to declare variables ?
2. What is the use of symbolic constant ?
3. Which statement used for skipping of loop in C ?
4. Explain else-if ladder with suitable example.
5. Discuss the limitations of using getchar() & scanf() functions for reading strings ?
6. Write a program to enter check whether the given number is divisible by 8.
7. Explain formatted output statements in C
8. What is the difference between "=" and "==" ? Explain.
9. Differentiate array and structure.
10. Explain the use of formal arguments. Explain.
11. How to open a data file in C ?
12. What is the purpose of calloc() function ? Explain.

(8 × 3 = 24 marks)

**Section B (Short Essay Type Questions)***Answer at least **five** questions.**Each question carries 5 marks.**All questions can be attended.**Overall Ceiling 25.*

13. Explain the different types of Tokens in C with relevant program examples.
14. Arithmetic expressions, precedence of arithmetic operators and Type conversion in Expressions. Explain each with examples.

**Turn over**

15. When and why we use looping statements in C ? Write a program to find the average of positive numbers from a list of numbers using loop and continue statement.
16. What is a NULL character ? Why is it important ? Explain any three string handling functions in detail.
17. Write a program to find second largest and smallest element from a list of numbers without use an array.
18. Is it possible to pass structure variable to function ? Explain how to pass structure members as an argument ? With examples.
19. Write a C program to swap two numbers using call by value method.

(5 × 5 = 25 marks)

### Section C (Essay Type Questions)

*Answer any one question.  
The question carries 11 marks.*

20.
  - a) Explain different input and output statements used in C.
  - b) What is the difference between call by value and call by reference ? Explain with the help of an example.
21.
  - a) Write a C program to multiply two matrices, use user defined functions and pass parameters.
  - b) What do you mean by scope of a variable ? What are local and global variables ? Give examples.

(1 × 11 = 11 marks)