

**22U338**

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Name: .....

Reg.No: .....

**THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2023**

(CBCSS - UG)

(Regular/Supplementary/Improvement)

**CC19U CSC3 C03 - PROBLEM SOLVING USING C**

(Computer Science - Complementary Course)

(2019 Admission onwards)

Time : 2.00 Hours

Maximum : 60 Marks

Credit : 2

**Part A** (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

1. Explain enumerated data type with an example.
2. What is the purpose of conditional operator?
3. What is the syntax of printf statements?
4. Give the syntax of do while and while.
5. What is a two dimensional array? How it differs from one dimensional array?
6. Write the syntax of initialization of character array in C.
7. What is the purpose of strcat() and strlen()?
8. What is the purpose of return () statement?
9. What is the use 'extern' variable?
10. Explain, how addition and subtraction operations can be performed by using pointers.
11. What is the difference between getc() and getw() in C ?
12. What is the use of malloc() and calloc() in C ?

**(Ceiling: 20 Marks)**

**Part B** (Short essay questions - Paragraph)

Answer *all* questions. Each question carries 5 marks.

13. Explain the overall structure of a C program with suitable example.
14. What are jumping statements? Compare 'break' and 'continue' statements with example.
15. Define array? Explain the declaration and initialization of one dimensional array with example.
16. Write a detailed note on Declaration and initialization of structure variables with examples.

17. What is recursion? Explain with example.
18. What is pointer ? How it is declared and accesses in C language?
19. Write a C program to read and print an array of elements using pointers.

**(Ceiling: 30 Marks)**

**Part C (Essay questions)**

Answer any *one* question. The question carries 10 marks.

20. What are selection statements ? Explain the different types of selection statements with suitable examples.
21. What are the various parameter passing techniques used in C? Explain with examples.

**(1 × 10 = 10 Marks)**

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