D 53672 (Pages : 2) Name...

Reg. No.....................................

FIRST SEMESTER (CBCSS—UG) DEGREE EXAMINATION NOVEMBER 2023

Information Technology

BIT 1B 01—PROBLEM SOLVING USING C

(2019—2023 Admissions)

Time : Two Hours Maximum : 60 Marks

Section A (Short Answer Type Questions)

Each correct answer carries a maximum of 2 marks.
Ceiling 20 Marks.

1. List out the characteristics of a good programming language.

2. Explain the use of format specifiers in C.

3. Define the term 'type casting'.

4. Explain the use of printf() statement.

5. How a matrix can be declared in C ?

6. What is a Pointer ?

7. What are enumerated datatypes in C ?

8. Differentiate structure and union.

9. Mention the string function to compare two strings.

10. Differentiate compiler and interpreter.

11. What are Files ?

12. Define a) malloc ; and b) calloc.

Section B

Each question carries 5 marks.
Ceiling 30 marks

13. Explain different storage classes in C with example.

14. Explain the various types of loop statement used in C language.

Turn over

15. Explain various bitwise operators in C.

16. What is the difference between function prototype and function definition ? Explain with an example.

17. Distinguish break and continue statements with the help of examples.

18. What is Recursion ? Write a program to find the factorial of a number using recursion ?

19. Write a C program to find the number of vowels in a string.

Section C

Answer any **one** *question.*

10 *marks.*

20. Discuss about various programming languages with its advantages and limitations.

21. Explain :

    a] I/O operations on files ; and

    b) Dynamic memory allocation.

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