Reg. No. : ....

Name : ....

Second Semester B.Sc. AI & ML Degree (CBCSS – OBE-Regular) Examination, April 2024
(2023 Admission Onwards)
Core Course
2B02 AIML : PROGRAMMING IN C

Time : 3 Hours

Max. Marks : 40

PART – A
(Short Answer)

Answer **all** questions from this Part. Each question carries 1 mark. (6×1=6)

1. List the importance of a C program.

2. What is a string constant in C ?

3. What is the purpose of scanf() function ?

4. Write the syntax of do... while statement.

5. Define a local variable.

6. What is a pointer ?

PART – B
(Short Essay)

Answer **any six** questions from this Part. Each question carries **2** marks. (6×2=12)

7. What is initialization ? Why is it important ?

8. What is the use of mathematical functions in C ? Give an example.

9. How can we use the putchr() function to read multicharacter strings ?

10. Explain GO TO statement in C language.

11. Distinguish between actual and formal arguments.

12. When do we use the unions ? Explain.

13. What is pointer expressions ? Give an example.

14. How do you define and opening a file ?

PART – C
(Essay)

Answer **any four** questions from this Part. **Each** question carries 3 marks. (4×3=12)

15. Write a program to determine and print the sum of the following harmonic series for a given value of n :

    $1+\dfrac{1}{2}+\dfrac{1}{3}+...+\dfrac{1}{n}$. The value of n should be given interactively through the terminal.

16. Explain with example, the logical operators in C.

17. Write a program to read four values a, b, c and d from the terminal and evaluates the ratio of (a + b) to (a – b) and prints the result if c – d is not equal to zero.

18. Explain using example, one-dimensional arrays using in C language.

19. Explain in detail, the elements of function definition.

20. Write a program to illustrate the use of indirection operator '*' to access the value pointed to by a pointer.

PART – D
(Long Essay)

Answer **any two** questions from this Part. **Each** question carries 5 marks. (2×5=10)

21. Explain in detail with examples, the different types of constant used in C language.

22. What are the main string handling functions in C ? Explain.

23. What is meant by the following terms ?

    a) Nested structure

    b) Array of structures

    Give a typical example of use of each of them.

24. Write a program that will receive a filename and a line of text as command line arguments and write the text to the file.

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