INTEGRATED MSC DEGREE EXAMINATION, FEBRUARY 2024

First Semester

INTEGRATED MSC COMPUTER SCIENCE-ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING, INTEGRATED MSC COMPUTER SCIENCE-DATA SCIENCE

CORE - ICSC1CR2 - PROGRAMMING IN C

2020 Admission Onwards

A4726C75

Time: 3 Hours   Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. What are the advantages and disadvantages of machine language?

2. What is a logical error?

3. Variable is a named memory location. Justify you answer.

4. Write a C program to check whether a number is even or odd.

5. What is a user defined function? Give an example.

6. Compare static and automatic variables.

7. Define multidimensional array.

8. Explain the effect of the following statement: int a, *b = &a ;

9. How can we access individual structure members using pointer?

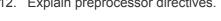10. When does a programmer use #include directive?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain flowchart and various notations used with examples.

12. Explain preprocessor directives.

13. Explain the categories of operators based on number of operands in c.

14. Write a C program to find sum of Natural numbers from 1 to N using for loop.

15. Explain break and continue statement with examples.

16. What is the difference between getchar() and gets() in C? Explain with examples.

17. Explain union in detail.

18. Explain the functions used for read a file.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain different approaches in programming.

20. Explain looping statements in c with example.

21. Explain pointer as function argument with example.

22. Create a structure named student that has name roll and mark as members. Assume appropriate type and size of member. Wite a program using structure to read and display n number of student details.

(2×5=10 weightage)