6436

BOARD DIPLOMA EXAMINATION, (C-16)

MARCH / APRIL — 2021

DECE — FOURTH SEMESTER EXAMINATION

PROGRAMMING IN C & MATLAB

Time : Three Hours]   [*Maximum Marks* : 80

PART-A   3×10=30

Instructions :   (*i*)   Answer **all** questions.

(*ii*) Each question carries **three** marks.

(*iii*) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1.   Define an expression and show how to evaluate.

2.   List any three bitwise logical operators.

3.   List three types of iterative statements supported by C.

4.   Differentiate between if and if else statements in C.

5.   State the use of return statement.

6.   List various arithmetic operators in pointer.

7.   Write the steps to find the size of Union.

8.   What is the use of Union ?

9.   List various arithmetic and relational operators in MATLAB.

10. Write the syntax of while loop in MATLAB.

Instructions :   (*i*) *Answer any **five** questions.

(*ii*) Each question carries **ten** marks.

(*iii*) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain about operator precedence.

12. Differentiate between while loop and do-while loop with syntax and example along with flow charts

13. Write a C program to print the triangle using for loop

1

1 2

1 2 3

1 2 3 4

14. Explain the string handling functions.

15. Write a C program to swap values of two variables using functions.

16. Explain any five preprocessor directives with examples.

17. (*a*) Differentiate between structure and union.

(*b*) Write a C program to find the memory occupied by the structure variable.

18. Explain plot(), fplot(), xlabel(), ylabel() legend command with an example for each.

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