

6436

BOARD DIPLOMA EXAMINATION, (C-16)

MAY/JUNE—2023

DECE - FOURTH SEMESTER EXAMINATION

PROGRAMMING IN C AND MATLAB

Time : 3 Hours]

[Total Marks : 80

PART—A

3×10=30

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Give the syntax for printf function.
2. Define an expression with an example.
3. State the importance of conditional expression.
4. Define an array.
- * 5. Define a pointer and give an example.
6. Give the purpose of strlen() function.
7. How to find the size of a structure?
8. State the use of a union.
9. List any three differences between C and MATLAB.
10. Give the syntax for iterative statement 'for' loop in MATLAB.

*

PART—B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) Explain writing the assignment statement with example. 4
(b) Explain increment and decrement operators with examples. 6
12. Explain if, if-else statements with an example program. 10
13. Write a C program to find the sum of two matrices. 10
14. Explain getchar(), getch(), getche(), and putchar() functions. 10
15. Write a C program to demonstrate the use of function cell. 10
16. Explain about structure variables and initialization of a structure with an example. 10
17. (a) Differentiate between structure and union. 5
(b) State the use of any three preprocessor directives with examples. 5
- * 18. Explain plot commands such as plot(x,y), title(), xlabel(), ylabel(), and legend(). 10

★ ★ ★