



C16-EC-402

6436

BOARD DIPLOMA EXAMINATION, (C-16)  
OCT/NOV—2018  
DECE—FOURTH SEMESTER EXAMINATION

PROGRAMMING IN C AND MATLAB

Time : 3 hours ]

[ Total Marks : 80

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**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. List three logical operators with symbols used for.
2. Write about assignment statement with an example.
3. List any three conditional statements supported by C.
4. Differentiate between break and continue statements.
5. Write the syntax of string function to copy one string to other.
6. List the types of parameter passing technique.
7. Define structure. What is the need of structure?
8. What is the use of union?

- \* 9. List any three differences between C and MATLAB.
10. State the need for MATLAB in solving engineering problems.

**PART—B**

10×5=50

**Instructions** : (1) Answer *any five* questions.

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

(3) The answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain the basic structure of C program by all the sections.
12. Explain if, if-else and nested-if statements with syntax and example.
13. Explain the initialization of the simple array and how to access array elements.
14. (a) Explain about call by value and call by variable parameter techniques.  
(b) Explain about formal parameters and actual parameters.
15. Write about the operations of getchar ( ), getch ( ), getche ( ) and putchar ( ) functions.
16. (a) Differentiate between structure and union.  
(b) List any three conditional preprocessor directives and explain.
17. Write a C program using structures to accept student detail, PIN name, three subjects' marks of 5 students and display them in tabular form.
18. Explain about creation of 1D and 2D array in Matalab with example.

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