



C14-EE-406

**4466**

**BOARD DIPLOMA EXAMINATION, (C-14)  
SEPTEMBER/OCTOBER - 2020  
DEEE—FOURTH SEMESTER EXAMINATION**

PROGRAMMING IN 'C'

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 any three relational operators.
2. Define constant, variable and keyword.
3. Write syntax and example for 'for-loop'.
4. Write any three differences between 'while' and 'do-while' loops.
5. Define 1D and 2D arrays.
6. Define string.
7. Define a function.
8. List any three storage classes supported by C.
9. Write the syntax to define a structure.
10. List any three preprocessor directives supported in C.

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**PART—B**

10×5=50

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

**11.** (a) Briefly explain arithmetic operators supported by C. 5  
(b) Write a C program to illustrate the concept of pointer arithmetic. 5

**12.** (a) Explain 'switch' statement with syntax and example. 5  
(b) Write a C program to perform arithmetic operations using 'switch' statement. 5

**13.** List various conditional statements and explain 'if-else' statement.

**14.** Explain the following string functions :

(a) strcat()

(b) strcpy()

(c) strcmp()

(d) strlen()

(e) strrev()

**15.** Write a C program to add two 2×2 matrices.

**16.** Explain return values and their types.

**17.** What is the difference between 'call by value' and 'call by reference'?

**18.** How is structure different from union? Explain with example.

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