# 4466

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

### PROGRAMMING IN 'C'

*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.** 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.

**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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