C16–EC–**406**

5653

BOARD DIPLOMA EXAMINATION, (C–16)
MARCH/APRIL—2018
DECE—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 the character set of C language.

2. List the three logical operators supported by C.

3. List the four conditional statements supported by C.

4. Differentiate between break and continue statements.

5. Show how to declare and initialize one-dimensional and two-dimensional arrays with an example.

6. Define string. List any four string-related functions.

7. Define a global variable.

8. Define a function.

9. Define a structure.

10. Define a Union.

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PART—B 10×5=50

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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)* Explain the increment and decrement operators. 5

(b) List any three arithmetic and three logical operators with example. 5

12. Write a C program to determine the largest of three numbers using nested if statements. 10

13. *(a)* Explain the nested loops. 5

(b) Write a C program to find the sum of 10 numbers, stored in an array. 5

14. Write a C program to find the transpose of a matrix. 10

15. Write the operations of string manupulation functions strcat( ), strchr( ), strncmp( ), strcpy( ) and strlen( ). 10

16. Explain passing parameters to the function by using 'call by value technique' with a sample program. 10

17. Define recursion and explain with example. 10

18. Explain the pre-processing directives : define, include, ifdef, ifndef. 10

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