C16–CM/IT–106

6026

BOARD DIPLOMA EXAMINATION, (C–16)

MARCH/APRIL—2018

DCME—FIRST YEAR 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 steps involved in C program execution.

2. Define an identifier and mention the rules to form it.

3. Differentiate between scanf( ) and printf( ).

4. Write the syntax of if-else statement.

5. Write the syntax of exit controlled loop with an example.

6. Define an array. Give the syntax to declare an array of size 10 and array name : X.

7. List any three string handling functions.

8. List any three storage classes available in C.

9. State the purpose of malloc( ) and realloc( ) functions in C.

10. Write how to create your own user defined data types in C.

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. Write a C program to print the 'Grade' of the student. Read 6 subject marks from the keyboard. Each subject carries 100 marks (total = 600).   10

Grade calculations :

Percentage>=70   Grade–Distinction
Percentage>=60&&percentage<70   Grade–First
Percentage>=50&&percentage<60   Grade–Second
Percentage>=40&&percentage<50   Grade–Pass
Percentage<40   Grade–Fail

12. *(a)* Explain nested for loop.   3

(b) Write a C program to print 7th table using nested for loop.   7

13. Write a C program to find the biggest and smallest among N numbers using arrays.   10

14. Write a C program to find the factorial of a given number using Recursive function.   10

15. *(a)* Explain about precedence and associativity of operators. 5

(b) Explain about scope and lifetime of variables. 5

16. Write a C program to exchange the contents of two variables, using call-by-reference parameter passing technique. 10

17. *(a)* Write the differences between structure and union. 5

(b) Explain about array and structures in C. 5

18. *(a)* What is a preprocessor? Explain #include and #define directives. 5

(b) Explain any five file handling functions in C. 5

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