7026

BOARD DIPLOMA EXAMINATION, (C-20)

OCTOBER/NOVEMBER—2023

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. Define the terms datatype and constant.

2. Write the difference between identifier and variable.

3. Write the syntax and purpose of getchar().

4. Write the purpose of size of operator.

5. Write the syntax of if-else statement with example.

6. Write the syntax of goto statement with example.

7. List any three string handling functions.

8. How do you declare a one dimensional array of float data type to store 10 values?

9. List any three advantages of pointers.

10. State the purpose of malloc() function.

Instructions : (1) Answer **all** questions.

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

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

11. *(a)* Explain various data types in C language.

(OR)

(b) Explain the usage of type qualifiers.

12. *(a)* Explain getchar() and putchar() with examples.

(OR)

(b) Explain various logical operators with examples.

13. *(a)* Explain switch case statement with an example program.

(OR)

(b) Write a C program to find whether a given number is Armstrong number or not.

14. *(a)* Write a C program to find the sum of two matrices.

(OR)

(b) Write a C program to find the total marks obtained by a student in three subjects using structure.

15. *(a)* Explain the differences between call by value and call by reference.

(OR)

(b) Write a C program to find the largest of three numbers using function with array as an argument.

PART—C

Instructions : (1) Answer the following question.

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

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

16. Write a C program to find the sum of all odd numbers between 300 and 400.

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