6026

BOARD DIPLOMA EXAMINATION, (C-16)

JANUARY/FEBRUARY—2022

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. Write any three importances of C-Language.

2. How do you declare and initialize values to the variables?

3. Write the syntax for formatted input and formatted output functions.

4. Write the syntax for **if...else** statement.

5. Differentiate between **break** and **continue** statements.

6. Define an array. List the types of arrays.

7. Write the syntax of **strcpy()** function with an example.

8. Write any three advantages of functions.

9. List any three differences between address operator and dereferencing operator.

10. List any three file opening modes and give their purposes.

PART—B

Instructions : (1) Answer *any* **five** questions.

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

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

11. *(a)* Explain various assignment operators with examples.   5

(b) Differentiate between local variable and external variables.   5

12. Write a C program to print the given digits in words (0-Zero, 1-One, 2-Two, 9-Nine) otherwise as invalid digit using **switch** case.   10

13. Write a C program to print Fibonacci numbers up to N numbers.   10

14. Write a C program to read integer values to a two dimensional array and print them in matrix form.   10

15. Explain functions with no arguments and no return value with a sample C program.   10

16. Explain the usage of **malloc()** and **free()** with a sample program.   10

17. *(a)* Explain self-referential structures with an example.   5

(b) Differentiate between structures and unions.   5

18. Explain macro substitution with a suitable example.   10

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