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C16-CM-IT–106

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BOARD DIPLOMA EXAMINATION, (C-16)

AUGUST/SEPTEMBER—2021

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. Differentiate between High-Level and Low-Level Languages.

2. Define and declare a variable in 'C'.

3. List three unformattable input character functions.

4. Write a C program to check whether the given number is even or odd.

5. Illustrate the usage of Continue statement.

6. What are the advantages of using arrays?

7. List any three String functions in C.

8. Write a short note on "void".

9. Write the purpose of address and indirection operators?

10. List any four pre-processor directives.

PART—B

10×5=50

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)* What is an Operator? Explain about Arithmetic Operators in C.

(b) How to invoke the function in C?

12. Briefly explain about various conditional and sequential statements available in C.

13. *(a)* Write the advantages of using For Loop in C.

(b) Write a C program to find the smallest at 'n' given numbers using For Loop.

14. Define two-Dimensional Array. Write a C program to print transpose of given matrix.

15. What is recursion? How to calculate factorial of a given number using recursion?

16. Explain Pointer Arithmetic in C.

17. Define union and explain how to initialize and access union members.

18. Explain macro substitution using #define with an example.

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