7026

C20-CM-WD-CAI-AIM-CCB-CCN–106

7026

BOARD DIPLOMA EXAMINATION, (C-20)

JANUARY—2023

DCM – 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. How to declare and initialize variables in C?
2. What is the need of data type? List any six data types in C.
3. Write a C program to find simple interest for a given principle amount, time and rate of interest.
4. Write the differences between unary and binary operators.
5. State the importance of break statement in switch case.
6. Write a C program to find whether a given number is even or odd.
7. Write the differences between structure and union.
8. How to declare string variable? Write the syntax for reading string from terminal.
9. Write about register and static storage classes.
10. Write the syntax for declaration of file pointer to a file.

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PART—B 8×5=40

Instructions : (1) Answer all questions.

(2) Each question carries eight marks.

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

11. (a) Explain the steps to perform editing, compiling, executing and debugging in a C program.

(OR)

(b) Explain the usage of type qualifiers in C.

12. (a) Explain bitwise operators with an example program.

(OR)

(b) Explain type conversion techniques in C with example.

13. (a) Write a C program to print days of a week for a given days from 1 to 7 using switch case.

(OR)

(b) Explain loop statements with examples.

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14. (a) Write a C program to perform matrix multiplication.

(OR)

(b) Explain string handling functions with example program.

15. (a) Explain function with arguments and return value with an example.

(OR)

(b) Write a C program to arrange array of elements in ascending order.

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PART—C

10×1=10

Instructions : (1) Answer the following question.

(2) The question carries ten marks.

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

16. Develop C program to create student structure with pin number, name and three subjects marks and find result percentage of students for a class of ten students and find topper of the class using array of structures and pointers.

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