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C20-CM-WD-AI-106

7026

BOARD DIPLOMA EXAMINATION, (C-20)

JUNE/JULY—2022

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. What is keyword? List any three keywords in C.
2. Define variable. Write the syntax for declaration of a variable.
3. Write about printf() and scanf() functions.
4. Write about conditional operator with an example.
- * 5. Write a C program to print sum of N natural numbers.
6. Compare between while and do-while loop statements.
7. Define strlen() function.
8. Differentiate between structure and union.
9. Define function and state the need for user defined function.
10. Write the need of pre-processor directives.

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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 criterion for valuation is the content but not the length of the answer.

11. (a) Define constant. Explain different types of constants in C.

(OR)

(b) Explain about user defined functions.

12. (a) Write a C program to find the given number is palindrome or not.

(OR)

(b) Evaluate the following C-expression and write the result :

(i) $X = 4/2 + 8 * 4 - 7\%3$

(ii) $X = 17 - 8/4 * 2 + 3 - 6$

13. (a) Explain conditional statements in C with examples.

(OR)

(b) Write a C program to print prime numbers between n1 and n2.

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14. (a) Write a C program to add two matrices.

(OR)

(b) Explain about array of structure with example.

15. (a) Explain about function with arguments and no return values with examples.

(OR)

(b) Explain storage classes in C.

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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 criterion for valuation is the content but not the length of the answer.

- 16.** Write a C program to find the factorial of a given number using recursion with the help of a function.

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