

7250

BOARD DIPLOMA EXAMINATION, (C-20)  
JUNE/JULY—2022

## DEEE - THIRD SEMESTER EXAMINATION

## PROGRAMMING IN C

Time : 3 hours ]

[ Total Marks : 80

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**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 identifier and keywords.
2. Give the syntax and purpose of printf() statement.
3. Give the if-else equivalent of ternary operator.
4. Give the importance of break in switch statement.
5. Give the definition and list any two types of arrays in C.
6. List any four string handling functions of C.
7. What is the need of return and void keywords to deal with functions?
8. State the importance of the keyword static in C.
9. Declare a union with four members out of which two are integers and one is char and other one is a float.
10. State the importance of #include directive.

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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) Write a C program to find the area of the triangle when three sides are given.

**(OR)**

- (b) Explain any two types of operators of C.

- 12.** (a) Explain the working of if ladder with syntax and an example program.

**(OR)**

- (b) Write a program in C to print all even numbers between 1 and N using for loop.

- 13.** (a) Write a C program to declare, initialize an array with 5 elements and to find the smallest number among them.

**(OR)**

- (b) Write a C program to declare and initialize three strings and to print them.

- 14.** (a) Write a C program using a user defined function to find the sum of three numbers with parameters and with return values.

**(OR)**

- (b) Write a C program using local and external variables.

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15. (a) Explain structure declaration, initialization and accessing members with an example.

**(OR)**

- (b) Illustrate with example how pointer can be used to realize the effect of parameter passing by reference.

**PART—C**

10×1=10

- Instructions :** (1) Answer the following question.  
(2) Question carries **ten** marks.  
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

16. Is it possible to handle 1D arrays without using for loops? If yes write a program to find the biggest element of N numbers using do-while loop for reading the array and while loop to print the array and for loop to find the biggest of N numbers. If not give the reasons to justify your answer.

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