



**C20-AEI-306**

**7219**

**BOARD DIPLOMA EXAMINATION, (C-20)  
OCTOBER/NOVEMBER—2023  
DAEI – 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 high level language and low level language.
2. Define identifiers and give two examples.
3. Write the syntax of IF...ELSE statement.
4. State the importance of decision making statements in programming.
5. Define nested loops.
6. Define an Array.
7. List any three functions used for reading and writing strings.
8. List any three standard built-in functions.
9. Define function call.
10. Define structure.

**PART—B**

8×5=40

- Instructions :** (1) Answer either (a) or (b) from each question.  
(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) Explain the increment and decrement operators.

**(OR)**

(b) Explain the structure of C language program.

**12.** (a) Write the syntax of switch statement and explain.

**(OR)**

(b) Write a program to find the sum of given numbers using 'for' loop.

**13.** (a) Write a program to find  $3 \times 3$  matrix subtraction.

**(OR)**

(b) Write a C program to find the largest number in an array.

**14.** (a) Illustrate functions with arguments with no return values with a program to find the sum and average of any five numbers.

**(OR)**

(b) (i) State the need for user defined functions.

(ii) Differentiate between local and external variables.

**15.** (a) Explain accessing members of a structure with example.

**(OR)**

(b) Write a program to declare and initialize the pointers.

**PART—C**

10×1=10

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

- 16.** Write a program to find the check whether the given number is even or odd using decision making statements.

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