

## 7504

# BOARD DIPLOMA EXAMINATION, (C-20) OCTOBER/NOVEMBER—2023

#### DCCP - FOURTH SEMESTER EXAMINATION

### 'C' PROGRAMMING

Time: 3 Hours [ Total Marks: 80

#### PART—A

 $3 \times 10 = 30$ 

**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.** Write down the steps involved in problem solving.
- **2.** What is an algorithm?
- **3.** List out the features of 'C' language.
- **4.** What are the rules for naming a variable?
- **5.** Write the methods of type conversion in 'C'.
- **6.** List different keywords in 'C'.
- **7.** Write about input statements of 'C'.
- **8.** Write the format specification for printf() function.
- **9.** Define user defined function. Give example.
- **10.** Define array.

**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 an algorithm and draw a flowchart to find the average of 6 given numbers.

(OR)

- (b) Explain origin of 'C'.
- **12.** (a) Write a 'C' program to print the area of a rectangle. (Area = Length × Breadth)

(OR)

- (b) Explain the iterative loops in 'C' with formats.
- **13.** (a) Write a program to print even and odd numbers up to 100 using if..then..else.

(OR)

(b) Write a program to print the following output:

1

12

123

1234

12345

**14.** (a) Write a program to print 1 to 10 numbers using Do-While loop.

(OR)

- (b) Write a program to find the given year is leap year or not.
- **15.** (a) Write a program to print array elements in ascending order.

(OR)

(b) Explain the string handling functions with examples.

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**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 add the elements of single dimensional array and print the sum.

