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(Revision - 2015)

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Reg. No……
Signature …….

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, APRIL – 2020

PROGRAMMING IN C

[Maximum Marks: 75] [Time: 2.15 Hours]

PART-A

(Answer ***any three*** questions in one or two sentences. Each question carries 2 marks)

I. 1. Write any two examples for keywords in C.

2. Write the syntax of conditional operator.

3. Define pointer.

4. State how to declare an array.

5. Write the name of a standard library function to copy a string. (3 x 2 = 6)

PART-B

(Answer any ***four*** of the following questions. Each question carries ***6*** marks)

II 1. Differentiate variable and constants with example.

2. Write a C program to check whether a number is positive, negative or zero.

3. Explain call by value and call by reference with example.

4. Define recursion and write a program to find the factorial of a number using recursion.

5. Write a program to print the odd numbers present in an array.

6. Explain how to declare and access 2-Dimensional array elements in a program.

7. State the difference between array and structure.

(4 x 6 = 24)

PART-C

(Answer ***any of the three units*** from the following. Each full question carries 15 marks)

UNIT – I

III (a) Explain If, If-Else, Else-If-Ladder with syntax and example. (10)

(b) Write a C program to check whether a given number is prime or not. (5)

OR

IV (a) Explain the syntax of switch statement with an example. (8)

(b) Write a C program to read a character and to check whether the character is vowel or consonant. (7)

UNIT – II

V (a) Explain function prototype and function call with the help of example. (7)

(b) Write a C program to check whether the number is Armstrong or not using function. (8)

OR

VI (a) Explain fundamental data types in C. (6)

(b) Write a main program to read a number and find the sum of digits of a number with a function and print the result values in the main program. (9)

UNIT- III

VII (a) Write a C program to read an array with N elements and find the average of elements in an array. (6)

(b) Write a C program to read an array with N elements to count the Even and Odd numbers in an array using function. (9)

OR

VIII (a) Write a C program to find the sum of diagonal elements in an NxN matrix. (6)

(b) Write a C program to find the sums of two matrices using function. (9)

UNIT - IV

IX (a) Explain string functions in C. (10)

(b) Write a C program to find the length of the string. (5)

OR

X (a) Explain how to declare, access the structure elements in C. (5)

(b) Write C program to create structure student with data variables Reg_no, Name and Marks of 3 subjects of 10 students and display their mark list with total mark. (10)
