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Roll No.

MCS-401/DCA-101

Introduction to Programming using C

P.G.Diploma in Computer Application (PGDCA-20/DCA)

1ST Semester, Examination June 2022

Time : 2 Hours

Max. Marks:80

Note : This paper is of eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section-A

(Long Answer-type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Twenty (20) marks each. Learners are required to answer any two (02) questions only.

(2 x 20=40)

- Q.1. What do you mean by Scope of a variable? Differentiate between Global and Local Scope of variable giving an example of each.
- Q.2 What are Storage classes in C? Explain the method of declaration and working of the four storage classes in C.

P.T.O.

- Q.3 Differentiate between Call by value and Call by reference methods of parameter passing to a function giving an example of each.
- Q.4 Explain the concept of structure and union with an example.
- Q.5 a) Write a C-Program to determine if a number entered through keyboard is even or odd.
b) Write a C-Program to determine whether the number entered through keyboard is prime or not.

Section-B

(Short Answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Ten (10) marks each. Learners are required to answer any four (04) questions only.

(4 x 10=40)

- Q.1 Explain the usage of following Console I/O function in C: Scanf (), printf (), getch (), getche (), getchar (), gets (), puts ().
- Q.2 Write short notes on any two of the following :
- i. C preprocessor
 - ii. Strings & String Functions in C

P.T.O.

- Q.3 Define an Array? Write a Program in C to sort an array of integers in ascending order.
- Q.4 What are the conditional statement in 'C'? Write a complete 'C' program using any one of them.
- Q.5 What is Dynamic Memory Allocation? Explain the various functions of dynamic memory allocation.
- Q.6 Explain increment and decrement operators with example.
- Q.7 a) Explain 'break' and 'continue' statement with an example.
b) Explain recursion with an example.
- Q.8 Discuss in brief data types in 'C' with suitable example.
