.Net Exam – C#

*Duration: 3 Hours*

*First 10 questions: 10 x 5 = 50 Marks, 11th question: 1 x 50 = 50 Marks*

*Create word document for first 10 questions and 11th question upload in to repository*

1. What is call by value and call by reference explain with examples
2. Write a C# Sharp program to print on screen the output of adding, subtracting, multiplying and dividing of two numbers which will be entered by the user.
3. Write a method or program to find a Nth highest or lowest number in a given series of numbers
4. Write a program to convert first letter of each word into upper case and others into lower case from the given string
5. Write a program to Print how many caps letters, small letters, words present in a given string
6. Explain the differences between Abstract class and Interfaces
7. Explain about method overloading and overriding with example
8. Write a method with 2 parameters (sorting type, sort data) and return the sorted data
9. Write a C# program to Remove Duplicate characters from a given String
10. Write a C# Method which takes string parameter and returns a reversed string / number given in a parameter. do this program without using direct C# method
11. Retrieve data from database using ADO.Net in 3-tier architecture and display that data in console application and for inserting data also.

**1**  call by value: Call by value method copies the value of an argument into the formal parameter of that function. Therefore, changes made to the parameter of the main function do not affect the argument.

call by reference: Call by reference method copies the address of an argument into the formal parameter. In this method, the address is used to access the actual argument used in the function call. It means that changes made in the parameter alter the passing argument.

**6**  Abstract Class: It has both declaration and definition part. A class can use only one abstract class. Abstract class contains methods fields and constants. Multiple inheritance is not achieved by abstract class.

Interface: It contains only a declaration part. Multiple inheritance is achieved by interface. It can only contain methods, properties, indexers, events.

**7.** **Method overloading:** It is defined as the creating multiple methods in a class and with same names but with different parameters.

**Method overriding: It** is defined as the creating with multiple methods in a class with same names and same parameters but one should be in base class and another should be in child class.

**Note:** Examples in VS 2020