**Introduction To C# .Net**

**Exercise**

Q5. Difference between Namespace and assemblies ? (T)

Solution:

**Assembly:**

An assembly provides a fundamental unit of physical code grouping. It is a unit of Deployment & a unit of versioning. Assemblies contain MSIL code.

**Namespace:**

A namespace provides a fundamental unit of logical code grouping. It is a Collection of names wherein each name is Unique.They form the logical boundary for a Group of classes.

Namespace must be specified in Project-Properties.

Q.9.What is the value data type and reference data type in c# ? (T)

Solution:

**Value Types:**

A data type is a value type if it holds the data within its own memory allocation. Value types include the following:

* All numeric data types
* Boolean, Char, and Date
* All structures, even if their members are reference types

Every structure is a value type, even if it contains reference type members. For this reason, value types such as Char and Integer are implemented by .NET Framework structures.

**Reference Types**:

A reference type stores a reference to its data. Reference types include the following:

* String
* All arrays, even if their elements are value types
* Class types, such as form.

A class is a reference type. Note that every array is a reference type, even if its members are value types.Since every reference type represents an underlying .NET Framework class, you must use the New Operator keyword when you initialize it. The following statement initializes an array.