

**H.N.G. University, Patan**  
**M.C.A(5 Years Integrated Programme) SEMESTER - VII**  
**703 : Advance Web Technology - I**

---

**Unit : 1**

**[20%]**

**Overview of .net framework:** .net architecture, framework class library, Common Language Run Time, managed code, assemblies, Intermediate Language, Just In Time Compiler, common type system, common language specification, .Net Features

**File I/O and Streams:** Drive info class, Directory Info class, file and file Info, working with paths, Reading and Writing Files: Streams, Readers and Writers

**Unit : 2**

**[20%]**

**Introduction to C#:** Data Types (Boxing and UnBoxing), Operators, Access Specifier

**OOPS Concepts:** Class, Inheritance, Constructor, Destructor, Abstraction, interface, polymorphism (Over loading and over ridding), Garbage Collection, Array (One Dimensional and Two Dimensional), Jagged Array, Collection: Generic Collection (List), Non Generic Collection (Array list, Hash table,), Property, Delegates and events (Multicasting, Multicasting Event), Exception Handling, Introduction to Namespace: Creating & Using Namespace (DLL)

**Unit : 3**

**[30%]**

Architecture of ADO.Net, Comparison with ADO (Connected and Disconnected Architecture), .Net Data provider, Data Adapter, Data Set, Data Row, Data Column, Data Relation, command, Data Reader

**Querying with LINQ:**

LINQ to Objects: Traditional Query Methods, Replacing Traditional Queries with LINQ, Data Grouping, LINQ Operators, and LINQ joins, Paging using LINQ

**LINQ to SQL:**

Insert, Update And Delete Queries through LINQ

**Unit : 4**

**[30%]**

**ASP.Net:** ASP.NET Page Life Cycle, Server Controls: label, dropdown list box, validation controls, list box, text box, radio button, check box, Validation Controls, Request, Response and Server Object

**State Management :** session, cookie, View State, **Data Rendering Controls:** Grid View, Datalist, Repeater, List view, Binding and perform operations (Insert, Update, Delete) with Grid View, Creating and Using web services, Working with Master pages

**Navigation Controls:** Understanding Site Maps, SiteMapPath, Menu, Tree View

**Rich Controls:** File Upload, Calendar, Adrotator

**Reference Books:**

1. Complete Reference C# - Herbert schildt (TMH Publication)
2. Professional ASP.NET 4 in C# and VB
3. Complete reference Asp.Net - Herbert schildt (TMH Publication)
4. Asp.Net with Visual c#.Net 2003-Wrox Publication
5. Visual c#.Net 2003-Wrox Publication
6. Asp.net 4 Unleashed.