18CSPE707	C# & .NET FRAMEWORKS	L	T	P	C
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Course Objectives:

1.	To identify the major elements of the .NET frame work and .NET platform
2.	To explore the object oriented concepts of C#
3.	To write C# programs and Web based applications on .NET

UNIT I	INTRODUCTION TO C#	9	+	0

Introducing C#, Understanding .NET, overview of C#, Literals, Variables, Data Types, Operators, checked and unchecked operators, Expressions, Branching, Looping, Methods, implicit and explicit casting, Constant, Arrays, Array Class, Array List, String, String Builder, Structure, Enumerations, boxing and unboxing. Font,

UNIT II	OBJECT ORIENTED ASPECTS OF C#	9	+	0

Class, Objects, Constructors and its types, inheritance, properties, indexers, index overloading, polymorphism, sealed class and methods, interface, abstract class, abstract and interface, operator overloading, delegates, events, errors and exception, Threading.

UNIT III	APPLICATION DEVELOPMENT ON .NET	9	+	0

Building windows application, Creating our own window forms with events and controls, menu creation, inheriting window forms, SDI and MDI application, Dialog Box(Modal and Modeless), accessing data with ADO.NET, DataSet, typed dataset, Data Adapter, updating database using stored procedures, SQL Server with ADO.NET, handling exceptions, validating controls, windows application configuration.

UNIT IV	WEB BASED APPLICATION DEVELOPMENT ON .NET	9	+	0

Programming web application with web forms, ASP.NET introduction, working with XML and .NET, Creating Virtual Directory and Web Application, session management techniques, web.config, web services, passing datasets, returning datasets from web services, handling transaction, handling exceptions, returning exceptions from SQL Server.

UNIT V	CLR AND .NET FRAMEWORK	9	+	0

Assemblies, Versoning, Attributes, reflection, viewing metadata, type discovery, reflection on type, marshalling, remoting, security in .NET

Total (L+T)= 45 Periods

Course Outcomes:		
Upon completion of this course, the students will be able to:		
CO1	:	Identify the major elements of the .NET frame work and .NET platform
CO2	:	Apply the object oriented concepts of C#
CO3	:	Write C# programs and Web based applications on .NET

Text Books:	
1.	Herbert Schildt, "The Complete Reference: C# 4.0", Tata McGraw Hill (Unit I - II)
2.	Christian Nagel et al. "Professional C# 2012 with .NET 4.5",Wiley India .(Unit III-V)

Reference Books:	
1.	Andrew Troelsen , "Pro C# 2010 and the .NET 4 Platform, Fifth Edition, A Press
2.	Ian Griffiths, Matthew Adams, Jesse Liberty, "Programming C# 4.0", Sixth Edition, O'Reilly,