

GANPAT UNIVERSITY									
FACULTY OF ENGINEERING & TECHNOLOGY									
Programme	Diploma Engineering				Branch	COMPUTER ENGINEERING			
Semester	IV				Version	1.0.0.0			
Effective from Academic Year		2018-19			Effective for the batch Admitted in		June 2018		
Subject code	1CE2404		Subject Name		GUI Base Application Development				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	3	0	2	0	5	Theory	40	60	100
Hours	3	0	4	0	7	Practical	60	40	100

Pre-requisites:
Basic Concept of Programming

Course Learning Outcomes:
<p>The course content should be taught and implemented with an aim to develop different skills leading to the achievement of the following competencies and course learning outcomes:</p> <ul style="list-style-type: none"> <li>• Understand the basic framework of .net</li> <li>• Understanding and development of console applications.</li> <li>• Understand the basic forms and controls which is used for making windows applications.</li> <li>• Understand how windows application can be used to connect database to retrieve the data.</li> <li>• Understand ASP.net and HTML controls.</li> </ul> <p>The practical should be carried out in such a manner that students are able to acquire different learning outcomes in cognitive, psychomotor and affective domain to demonstrate course learning outcomes.</p>

Course Content				
Name of UNIT	Unit Content	Unit Learning Outcomes	Marks	Hrs
UNIT – 1 INTRODUCTION TO .NET FRAMEWORK	1.1. The Common Language Runtime 1.2. Compilation in .NET (MSIL and JIT), CTS, CLS 1.3. Cross language, Integration, Garbage Collection, Assemblies 1.4. Name spaces, Versioning and deployment 1.5. Framework class Library	1.1. Describe CLR. 1.2. Draw .net framework. 1.3. Describe the GC and assembler. 1.4. State the use of name space and versioning. 1.5. Describe framework class library.	10	7
UNIT – 2 C# BASICS	2.1. Variables and Constants, Data Types, 2.2. Scope of variables, 2.3. Formatting Data, 2.4. Exceptions, Conditions, 2.5. Input Validation, 2.6. Loops, Arrays, Functions	2.1. Describe the variable, constant and data types. 2.2. Describe scope of variable. 2.3. State how to format data. 2.4. Describe how to work with exception and conditions. 2.5. Implements the Input validation	10	10

		2.6. Describe the loop, arrays and functions		
UNIT – 3 WINDOWS FORMS AND CONTROLS	3.1. Creating Windows Forms, Windows Forms Properties and Events, 3.2. Controls (Properties and Events of Controls):Button, Label, TextBox, Numeric Up Down, CheckBox, RadioButton, DateTimePicker, GroupBox, ListBox, ListView, ComboBox, TabControl, PictureBox, ProgressBar, ToolTips, RichTextbox, Timer, DataGridView	3.1. Describe how to use the windows forms. 3.2. Describe and state the use of the different controls in C#.net	20	13
UNIT – 4 WORKING WITH ADO.NET	4.1. Introduction to ADO.NET, ADO.NET Architecture, 4.2. Understanding SqlConnection, SqlCommands, SqlDataReader, 4.3. DataSet, Data View and DataAdapter	4.1. Draw the ado.net architecture. 4.2. Build the sql connection, sqlcommand, sqldatareader. 4.3. Implements dataview,data set and data adapter.	15	8
UNIT – 5 INTRODUCTION TO ASP.NET	5.1. Introduction to ASP.NET, 5.2. Working with Web and HTMLControls	5.1. Describe ASP.net. 5.2. Describe and use of the HTML Controls.	5	7

List of Practical		
No.	Unit	Name of Practical
1	UNIT 1	Study of .NET framework with comparison of various framework versions and Explain Architecture of .NET Framework.
2	UNIT 1	Demonstrate to IDE Visual Studio and compare new features of to other versions of Visual Studio. Study of language features and comparison of VB.NET and C#.
3	UNIT 2	Build the following program using console application in C#. <ul style="list-style-type: none"> <li>• sorting and searching</li> <li>• Prints the prime number.</li> <li>• Fibonacci and factorial of a given number.</li> </ul>
4	UNIT 2	To create Arithmetic Calculator using Console in C#.
5	UNIT 3	To create Windows Form based application using controls.
6	UNIT 3	To create Master Form with Windows application.
7	UNIT 4	Construct application for Dataset, Data Reader, XML Reader & Data Sources (SQL, Object & XML) with Any Windows or Web Application
8	UNIT 4	To build application for Data Controls like Data List, Grid View, detail View, Repeater and List Bound Control
9	UNIT 5	Create application in Data Base Controls to make a login application with registration.
10	UNIT 5	To build a Make a small project using C#

List of Instruments / Equipment / Trainer Board	
1	Computer with latest configuration
2	Microsoft Visual Studio 2017

List of Reference Books			
No	Title of Reference Books	Authors	Publication
1	Beginning ASP.NET 4.5.1: in C# and VB	ImarSpaanjaars	Wrox
2	Introducing .NET	WROX Development	WROX Development
3	Mastering Visual Studio 2017	Kunal Chowdhury	Packt

Link of Learning Web Resource	
1	<a href="https://www.tutorialspoint.com/csharp/">https://www.tutorialspoint.com/csharp/</a>
2	<a href="https://www.javatpoint.com/c-sharp-tutorial">https://www.javatpoint.com/c-sharp-tutorial</a>
3	<a href="https://www.c-sharpcorner.com/csharp-tutorials">https://www.c-sharpcorner.com/csharp-tutorials</a>