

GANPAT UNIVERSITY									
FACULTY OF TECHNOLOGY									
Programme	Bachelor of Technology				Branch/Spe c.	Computer Science and Engineering (CBA/MA/BDA)			
Semester	IV				Version	1.0.0.0			
Effective from Academic Year		2017-18			Effective for the batch Admitted in			June 2017	
Subject code	2CSE407		Subject Name		Web Technology				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3	0	1	0	4	Theory	40	60	100
Hours	3	0	2	0	5	Practical	30	20	50
Pre-requisites:									
Web Development, Database Designing and Access, Object Oriented Programming Fundamentals.									
Learning Outcome:									
After successful completion of this course, student will be able to:									
<ul style="list-style-type: none"> Understand the concepts of web development and management Understand the concepts of web engineering Understand the .Net framework and its components Design the web application using ASP.Net server controls Access the data using ADO.Net and ASP.Net Understand use of JQuery and AJAX 									
Theory syllabus									
Unit	Content								Hrs
1	Introduction to web development & WebE Framework and Process World Wide Web and Hypermedia, Hypertext Design, Hypertext Design problems, Web site organizational styles, Web site knowledge structures, Web action types, Web interface metaphors, Information Decomposition and Information Structuring, image handling, Cookie management, Session management, Web Engineering Framework, Web Engineering Process and Process Flow.								8
2	Microsoft .Net Framework What is .NET framework, .Net Framework Architecture, Components of .Net Framework, The Common Language Runtime (CLR), The common type system (CTS), Managed code and unmanaged code, The common language specification (CLS), The .NET framework class library, Namespaces, Assemblies								10
3	Web Development in ASP.NET using MVC Architecture Concept of ASP.Net, ASP. NET Server Controls, Validation controls, global. asax file, web.config file, Web application using ASP.Net, MVC Architecture, Understanding Model, View and Controller, Understanding Routing System, Routes and HTTP								10
4	N-tier Architecture and ADO. NET Introduction to ADO. NET, Understanding the Connection Object, Command Object, Data Adapter, DataSet, Data Reader, Working with Database using ASP.Net								8
5	Integrating AJAX and JQuery in ASP.NET Application Introduction to AJAX, Embedding AJAX Toolkit in ASP.NET application, Introduction to JQuery, Accessing DOM using JQuery, Integrating JQuery in ASP.NET Application								6

Self-Study Topics	
<ul style="list-style-type: none"> • Working of CMS System. • Implementation of blog using WordPress • Implementation of eCommerce Website using Magento. • Understanding of NodeJS 	
Practical content	
<ul style="list-style-type: none"> • Web page development for flipkart.com registration form. • Dynamic Web page development for salary calculation using HTML and JavaScript Dynamic Web page development for validation of student registration form using JavaScript. • Server side Web page development using Visual Studio. • Server side Web page development using ASP.Net server controls and validation controls. • Converting HTML, CSS Template into asp.net master page. • Add SQL Server 2012 Database to your ASP.Net/ C#.Net web application • Working with SQL Server Database using ASP.Net/ C#.Net web application • Developing C#.Net web application using Bound Controls • Performing Database Operations using SQL Data Source (Wizard) • Accessing DOM and Integrating JQuery in ASP.NET application • Integrating AJAX Toolkit in ASP.NET application and accessing controls. 	
Text Books	
1	Web Technologies: A Computer Science Perspective, Jeffrey C. Jackson, Pearson, 1/e, 2007
2	Web Engineering: A Practitioner's Approach, Roger Pressman, McGraw-Hill, 2008
3	Beginning with ASP.NET
4	O'RELLY JQUERY COOKBOOK
Reference Books	
1	Beginning ASP.NET 2.0 with C# (Wrox Beginning Guides)