

ST. ALOYSIUS COLLEGE (AUTONOMOUS), JABALPUR

B.Com II year (Computer Application) Elective

Part A: Introduction			
Program: Diploma		Class: UG	Year: II year
session:2022-2023			
Subject: Computer Application			
1.	Course Code	S2-COAP2T	
2.	Course Title	Introduction to ASP.NET & C#	
3.	Course Type	Core course	
4.	Pre-requisite	open to all	
5.	Course Learning Outcomes (CLO)	On the completion of this course student will be able- CO1: To learn fundamentals of .net framework CO2: To enrich knowledge about Windows Forms, Controls and ASP.NET based applications. CO3: To gain proficiency in C# by building stand-alone applications in the .NET framework using C#. CO4: To build data-driven applications using the .NET Framework, C#, and ADO.NET CO5: To acquire skills to create web-based applications and Reports using .net technologies	
6.	Credit Values	Theory	
7.	Total Marks	Max.Marks:30+70	Min.Passing Marks:33
Part B: Contents of the Course			
Introduction to ASP.NET & C#			
Total No. of Lectures =60(3 hours/ lecture per week)			
Unit	Topics	No. of Lectures	
I	Introduction to .NET Framework: NET Architecture, CLR, the Just-in-Time Compiler, C# - The Basics and Console Applications, in C#: Introduction to C#.NET Development Environment, Data type, Variables constants, operators, Decision making, Loops, Class, Object, Arrays.	12	
II	Overview of OOPs: Encapsulation, inheritance, polymorphism, abstraction using Class Library, Creating User- Defined Classes. Windows Forms and Controls: The Windows Forms Model, Creating Windows Forms Windows Forms Properties and Events, Windows Form Controls, Menus - Dialogs boxes.	12	

III	Introduction to ASP.NET: Overview of ASP.NET framework, Application. ASP.NET Life Cycle, page life cycle phases, Initialization, Instantiation of the controls on the page, Restoration and maintenance of the state Understanding ASP.NET Controls, Applications Web servers, installation of IIS. Web forms, Web form controls, server controls, client controls, web forms & HTML.	12
IV	Programming in ASP.NET, Adding controls to a web form Buttons, Text Box. Labels, Checkbox. Radio Buttons, List Box etc. States of ASP.NET View State, Control State, Session State, Application State. Creating a multiform web project, running a web Application, Event Handling- Application and Session Events, Page and Control Events. Validation controls: Required Field validator, Range Validator, Compare Validator, Regular Expression Validator, Custom Validator, Validation Summary	12
V	Database connectivity in ASP.NET: Architecture of ADO.NET, Create Connection using ADO.NET Object Model, Connection Class, Command Class, Data Adapter Class, and Dataset Class. Display data on data bound Controls and Data Grid. Database Accessing on web applications: Data Binding concept with web, creating data grid, Binding standard web server controls. Display data on web form using Data bound controls.	12

	Part C: Learning Resources	
	Suggested Digital Platforms Weblinks <ol style="list-style-type: none"> 1. https://docs.microsoft.com/en-us/dotnet/framework/get-started/system-requirements 2. https://mvw.e-sharpcorner.com/UploadFile/18585c/overview-of-oops/ 3. https://mvw.dotnettricks.com/1eaén/designpatterns/adapters-design-pattern-dotnet 4. http://www.mphindigranthacademy.org/ Suggested Readings: <ol style="list-style-type: none"> 1. ASP .NET Unleashed C# programming — Wrox Publication. 2. C# Programming Black Book by Matt Talles. 3. VB.NET Programming Black Book by stevenholzer —dreamtech publications 4. Mastering VB.NET by Evangelospetroustos- BPB publications 5. Introduction to .NET framework-Worx publication 6. Books published by M.P. Hindi Granth Academy, Bhopal 	

B.Com II year
Practical List

1. Develop a console application in C# to find the addition of two numbers
2. Develop a console application in C# to find the simple interest
3. Develop a console application in C# to find the factorial of any n entered number
4. Develop a console application in C# to display a Fibonacci series
5. Develop a console application in C# to check whether a number is even or odd.
6. Develop a console application in C# to implement array.
7. Develop a console application in C# to find the product and division of entered numbers.
8. Write a program to declare a class "staff" having data of the members such as name and post. Accept this data and display the results.
9. Define a class, having "salary" of members displaying variables such as BASIC, DA, HRA .Develop a window application to find the total salary of the employee
10. Develop a window application using textbox, checkbox, radio buttons, list box, labels and validation.
11. Develop a ASP.NET dynamic website for student registration details.



ST. ALOYSIUS COLLEGE (AUTONOMOUS), JABALPUR

BA II year (Computer Application) Minor/Elective

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