



**INSTITUTE OF SCIENCE &
TECHNOLOGY FOR
ADVANCED STUDIES & RESEARCH**
THE CHARUTAR VIDYA MANDAL (CVM) UNIVERSITY



Sardar Patel Centre for Science & Technology, P.O. Box No. 13, Near Post Office, Mota Bazar,
Vallabh Vidyanagar-388120, Dist. Anand (Gujarat) INDIA

Ph: 02692-234955; Email: principal.istar@cvmu.edu.in , office.istar@cvmu.edu.in, Web: www.istar.edu.in

**M.SC. (INFORMATION TECHNOLOGY)
SEMESTER – II**

LAB MANUAL

Paper Code: 101410232

Paper Title: Practical based on .NET Core Framework

**Prepared By:
Dr. Suchita Patel
Assistant Professor
M.Sc. (IT) Department, ISTAR**

SR. NO.

LIST OF PRACTICALS

1. Write an installation step for Environment Setup for ASP.NET CORE.
Environment Setup
Install the .NET SDK, Visual Studio/Visual Studio Code.
Create and run a basic ASP.NET Core application using dotnet new mvc.
2. Write ASP.NET Core Console application to implement OOPs concepts using C#.
3. Create ASP.NET Core MVC Web Application to understand folder structure and work flow.
4. Create ASP.NET Core Web Application (MVC) to configure Git.
5. Create ASP.NET Core project to install packages via NuGet package manager.
6. Create ASP.NET Core Web Application to create Custom Middleware / use Built - in Middleware.
7. Develop ASP.NET Core empty application to understand the concept of Map, MapGet, MapPut , MapPost , MapDelete methods for routing. (Use Postman (API) & Tool.)
8. Develop ASP.NET Core Web Application using Conventional Routing
9. Develop ASP.NET Core Web Application using Attribute based Routing
10. Develop ASP.NET Core Web Application to implement Data Passing Techniques. (ViewBag, ViewData)
11. Develop ASP.NET Core Web application to set and get students data using model.
12. Design ASP.NET Core WebApplication to set and get employee data model using data passing techniques. (ViewData , ViewBag , TempData and Strongly Typed using Model)
13. Develop ASP.NET Core Web application implement action method return types
 - ViewResult

- JsonResult
 - ContentResult
 - ActionResult
 - IActionResult
14. Develop ASP.NET Core Web Application to install Bootstrap , Css and JQuery
 15. Design ASP.NET Core MVC application using _Layout.cshtml and _PartialLayout.cshtml.
 16. Design Employee Register form using **Tag Helpers** for ASP.NET Core MVC Application.
 17. Create a Sign Up Razor View using **Standard Html helpers** and **Strongly Typed Html helpers** in ASP.NET Core Web Application.

Standard Helpers:

- @HTML.TextBox
- @HTML.Password
- @HTML.Textarea
- @HTML.Checkbox
- @HTML.RadioButton
- @HTML.DropDownList
- @HTML.ListBox
- @HTML.Hidden
- @HTML.Editor
- @HTML.Display
- @HTML.ActionLink
- @HTML.BeginForm
- @HTML.Lgin

Strongly Typed Html Helpers:

- @HTML.Hiddenfor
 - @HTML.Labelfor
 - @HTML.TextBoxfor
 - @HTML.RadioButtnfor
 - @HTML.DropDownListfor
 - @HTML.CheckBoxfor
 - @HTML.Textareafor
 - @HTML.Passwordfor
 - @HTML.ListBoxfor
18. Create ASP.NET Core Web Application to implement scaffolding for CRUD Operations. **CRUD** -> Create , Read , Update , Delete
 19. Create web application using asp.net core mvc to apply form validations
 - Required
 - StringLength
 - Range
 - EmailAddress
 - Phone
 - Url
 - RegularExpressions
 20. Develop ASP.NET Core MVC Employee application to perform CRUD using EF (Entity Framework).
 21. Develop ASP.NET Core MVC Student application to perform CRUD using EF (Entity Framework).
