



**DHARMSINH DESAI UNIVERSITY, NADIAD**  
**FACULTY OF TECHNOLOGY**  
**B.TECH. SEMESTER V CE**  
**SUBJECT: (CE-509) Web Development in .NET**

Examination : Regular  
Date : 31/12/2018  
Time : 2.00 to 5.00 pm

Seat No : CE-82  
Day : Wednesday  
Max. Marks : 60

**INSTRUCTIONS:**

1. Answer each section in separate answer book.
2. Figures to the right indicate maximum marks for that question.
3. The symbols used carry their usual meanings.
4. Assume suitable data, if required & mention them clearly.
5. Draw neat sketches wherever necessary.

**SECTION – I**

- Q.1 Do as directed.** [10]
- (a) What is the difference between Managed and Unmanaged Code? [2]
  - (b) What is the difference between Page Load and Page Init Event of Life Cycle? [2]
  - (c) Write Code Behind statement to i) Kill Current Session ii) Set Session time out to 5 minutes. [2]
  - (d) Explain the arguments and return value of FormsAuthentication.Authenticate() Method. [2]
  - (e) List some important features of .NET core which are not present in .Net framework. [2]
- Q.2 Attempt Any TWO from the following questions.** [10]
- (a) Design an ASP.NET Application which counts number of Active sessions. Number of sessions is displayed in Label control on the web page. Also add functionality to count number of Hits on the page irrespective of session. [5]
  - (b) Using Form based authentication, create Login and Registration page and store user name and password in web.config file. Use password encryption to store password in web.config file. Create a page Admin.aspx which can only be accessed by admin user. [5]
  - (c) Create a DLL dbaccess.dll. User needs to pass database name and table name to the function present in the DLL and the function returns dataset containing all the records within the table. Write program to create DLL and Program which uses the DLL. [5]
- Q.3**
- (a) Explain Architecture of CLR and two step compilation process of ASP.NET. [5]
  - (b) Explain the steps to host ASP.NET application on Local IIS and on Azure cloud. [5]
- OR**
- Q.3**
- (a) Explain How Language Interoperability is achieved in .NET framework with the help of CLS and CTS. [5]
  - (b) Explain Disconnected Database Architecture of ADO.NET. [5]

## SECTION – II

**Q.4 Do as directed.**

[10]

- (a) What is Null coalescing operator ?? in C#? When is it useful? [2]
- (b) What is Verbatim literal in C#? How is it useful? [2]
- (c) What are delegates in C#? How is it useful? [2]
- (d) Differentiate: ref and out keywords used as method parameters [2]
- (e) What are the ways for deploying assemblies? How are they differing? [2]

**Q.5 Attempt Any TWO from the following questions.**

[10]

- (a) What is difference between late binding and early binding in C#? Explain in detail with a suitable example. [5]
- (b) Explain DLL hell problem with necessary code. [5]
- (c) Write necessary code for C# console application demonstrating functionality of addition and subtraction of two integer using concepts of partial class and partial methods. [5]

Also answer following questions for partial class and partial methods.

- I. Can partial definition span multiple modules (.exe or.dll)? Justify
- II. What does happen when signature of partial method is available but implementation is not available?
- III. What can be returned from a partial method?

**Q.6 (a) What are Indexer in C#? Explain with a suitable example. Also give brief idea about overloaded indexers.** [5]

- (b) Write a C# application that has interface IArea with method ComputeArea. IArea is implemented by class Square and class Circle. Both classes have implemented ComputeArea such that in class Square it returns area of square and in class Circle returns area of circle. Write necessary code for driver class as well. [5]

**OR**

**Q.6 (a) Answer following questions with respect to ASP.NET MVC**

[5]

- I. What is Action Selectors? Explain different Action Selectors attributes.
- II. Explain Model binding in MVC with a suitable example.
- III. Compare: ViewBag, ViewData and TempData. Explain each with a suitable code.

(b) Write a C# application that performs following functionality.

[5]

- Has Employee class with properties Id, Name, Salary, Title, Experience
- Has a method FindEmp that finds employee with specific title, salary given list of employee and criteria for employee search (i.e. title/salary).
- Use concept of Func delegate and lambda expression