

Roll No.

67193-N

**MCA 4th Semester 2 yr. Course
Examination – December, 2024**

WEB DEVELOPMENT USING .NET FRAMEWORK

Paper : 21MCA24C3

Time : Three Hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all by selecting *one* question from each Unit and Question No. 1 which is *compulsory*. All question carry equal marks.

1. (i) What is Interoperability ? How it is achieved in .NET framework ?
- (ii) Why C# is called also known as free form language ?
- (iii) Differentiate between Class level and Instance level variables with examples.
- (iv) What do you mean by Overriding methods ?

- (v) Explain any two components of IDE provided by .NET for developing Windows application.
- (vi) Name any two methods associated to DataSet class in reference to ADO.NET.
- (vii) What do you mean by dynamic compilation of pages by ASP.NET?
- (viii) Define hierarchical data bound controls used in ASP.NET

UNIT - I

- 2. (i) List any four important services offered by the Framework Base Classes to the users.
- (ii) What is Enumeration? How it is useful in C# programming? Give two examples of enum type values.
- 3. (i) Elaborate the execution model followed by different components of .NET framework for developing Web applications.
- (ii) Explain the following: String Builder class, Verbatim string and Immutable strings with one example for each.

UNIT - II

- 4. (i) Define Overloaded constructor. State rules for declaring and defining any two types of Overloaded constructor.

- (ii) What is Multiple inheritance ? Explain the order of execution of Constructors available at different levels of Classes.
- 5. (i) How further inheritance can be prevented by using Sealed concept at class and method levels ?
- (ii) Explain how Interfaces can be used to implement Multiple Inheritance by extending and implementing it.

UNIT – III

- 6. (i) What are Win Forms ? Explain how standard controls can be added to it.
- (ii) Define validation. How user input can be validated in Window applications ?
- 7. (i) Pictorially represent the Dataset object model, mention one functionality associated with each component Dataset.
- (ii) Explain how navigation between data records is achieved in ADO.NET.

UNIT – IV

- 8. (i) Explain the Page rendering phase of ASP.NET page life cycle with its importance.
- (ii) Differentiate between authorization and authentication process in reference to ASP.NET.

9. (i) Elaborate the purpose of the following controls used in ASP.NET: Data Source and Grid view controls.
- (ii) Define Web services, its components and functions (any four) performed by it in ASP.NET environment.
-