

(i) Printed Pages : 3

Roll No. ....

(ii) Questions : 9

Sub. Code : 

2	6	0	4	3
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Exam. Code : 

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**M.Sc. Information Technology 3<sup>rd</sup> Semester  
(2125)**

**.NET FRAMEWORK AND C#**

**Paper : MS-32**

**Time Allowed : Three Hours]**

**[Maximum Marks : 80**

**Note :—** Attempt five questions in all by selecting the compulsory question and at least one question from each unit.

**(Compulsory Question)**

- I. (a) What is .NET technology? Discuss in brief.  
(b) Briefly discuss the concept of namespaces in C#.  
(c) What is the use of interfaces? Discuss in brief.  
(d) Differentiate between serialization and deserialization.  
(e) List any two validation controls in ASP.NET.  
(f) What do you understand by state management? Discuss in brief.  
(g) What is a database? Discuss in brief.  
(h) What is ADO.NET? Discuss in brief. 2×8=16

## UNIT—I

- II. (a) Discuss .NET Framework with the help of a suitable diagram highlighting its major components. 10
- (b) Write short notes on literals, variables, and data types in C#. 6
- III. (a) Discuss the role of the Common Language Runtime (CLR) in program execution. 8
- (b) Discuss the usage of arrays and strings in C# with suitable examples. 8

## UNIT—II

- IV. (a) Discuss the concept of Polymorphism and Inheritance in C#. 8
- (b) Explain various I/O streams in C#. 8
- V. (a) Write short notes on Delegates and Events in C#. 8
- (b) Explain XML serialization in C#. 8

## UNIT—III

- VI. (a) Discuss the steps involved in deploying a Windows Forms application using any approach. 8
- (b) What do you understand by common dialog controls? Discuss their utility. 8
- VII. (a) Discuss the steps involved in creating a menu in Windows Forms. Appropriately assume any required information yourself. 8
- (b) Differentiate between ASP.NET and traditional ASP. 8

## UNIT—IV

- VIII.(a) Differentiate between connected and disconnected architecture. 8
- (b) Explain the difference between DataAdapter and DataReader. 8
- IX. (a) Explain the role of Command and Connection objects. 8
- (b) Discuss how DataGridView control can be bound to a Dataset. 8