

(i) Printed Pages : 3

Roll No.

(ii) Questions : 9

Sub. Code :

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Exam. Code :

4	6	1
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M.Sc. IT 3rd Semester

1125

INFORMATION TECHNOLOGY

Paper - MS-32 : .NET Framework and C#

Time Allowed : Three Hours]

[Maximum Marks : 80

Note :- Attempt **five** questions in all including the compulsory question and taking 1 question each from Unit I-IV.

UNIT-I

1. (a) How does .net technology support cross platform interoperability, security and integration ? Discuss. 8
- (b) Discuss the function of following windows/panes in Visual Studio IDE : Toolbox, Solution Explorer, Properties Window, Code and Design Pane. 8
2. Differentiate among following with appropriate examples :
 - (a) Out and ref method parameters
 - (b) as and is operator
 - (c) Rectangular and Jagged multidimensional arrays
 - (d) C# and Java programming language. 16

UNIT-II

3. Discuss following with example :
- (a) Static and Private Constructors
 - (b) Virtual and Override methods
 - (c) Sealed methods and Sealed classes
 - (d) Interfaces vs Abstract classes
 - (e) Multicast Delegates. 16
4. (a) What are Input and Output Streams ? Discuss in detail the methods and constructors of BinaryReader and BinaryWriter classes. 8
- (b) Compare the techniques used for deep and shallow serialisation with appropriate example. 8

UNIT-III

5. (a) Discuss the functionality and essential properties of following window form controls : Button, LinkLabel, TabControl, RichTextBox, CheckedListBox, RadioButton. 8
- (b) What is deployment ? Discuss the steps to deploy a Windows forms application. 8
6. (a) Discuss the various validation controls used in ASP.NET. 8
- (b) Discuss any four ways to manage state in ASP.NET web applications. 8

UNIT-IV

7. (a) Discuss in detail the various components of ADO.NET with appropriate diagram. 8
- (b) Write a program to insert two records in a table with following details :

Database Name : Student

TableName : Stu_detail (RollNo, Class, Name, Gender, FatherName, Mothername, Address). 8

8. (a) What are the important methods used by DataAdapter ? Write a code to fill a DataSet using DataAdapter. 8
- (b) What is a DataGridView control ? With the help of C# code discuss the steps to bind data to a DataGridView. 8

(Compulsory Question)

9. (a) Give 4 differences between C# and C++.
- (b) What are immutable strings ? Which class implements it ?
- (c) What is the use of finally statement in exceptional handling ?
- (d) Discuss briefly decimal data type in C#.
- (e) What is the use of destructors in C#, which already implements automatic garbage collection ?
- (f) Discuss the function of ReadByte method of FileStream class.
- (g) Which property is set to convert a windows form to MDI form ?
- (h) Compare ADO and ADO.NET. 2×8=16