

G-2/225/21

Roll No.....

M.Sc. II Semester Examination, 2021

INFORMATION TECHNOLOGY

Paper I

(Net Technology)

Time : 3 Hours]

[Maximum Marks : 100

Note : All questions are compulsory. Question Paper comprises of 3 sections. **Section A** is objective type/multiple choice questions with no internal choice. **Section B** is short answer type with internal choice. **Section C** is long answer type with internal choice.

SECTION 'A'**(Objective Type /Multiple Choice Questions)**

Choose the correct answer :

1 × 10 = 10

1. Which of the following .NET components can be used to remove unused references from the managed heap ?
- (a) Garbage Collector (b) CLR
(c) CTS (d) Class Loader

P.T.O.

2. JIT compiler compiles instructions into machine code at run time. State **True or False** ?
3.causes the loop to continue with the next iteration after skipping any statements in between.
- (a) break (b) continue
(c) exit (d) return
4. Incorrect Arithmetic Expression is not an Exception. State **True or False** ?
5. Stream classes are defined innamespace.
- (a) System.input (b) System.output
(c) System.IO (d) All of above
6. Which of the following control is used to validate that the two fields are equal :
- (a) Compare validator
(b) equals() method
(c) Required field validator
(d) None of the above
7. There is only one Global.asax file in one project. State **True or False** ?

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8. Which is not an ADO.NET Data Adapter Object?

- (a) OleDbData Adapter
- (b) SqlData Adapter
- (c) Query Data Adapter
- (d) All of the above

9. Is it possible to Serialize Hash Table with XML Serializer ? **Yes or No.**

10. WSDL stands for.....

- (a) Web Server Description Language
- (b) Web Server Descriptor Language
- (c) Web Services Description Language
- (d) All of the above

SECTION 'B'

3 × 10 = 30

(Short Answer Type Questions)

Note : Attempt any two questions from each unit.

Unit I

1. (a) What is task of JIT Compiler ?
(b) What is CIL ?

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- (c) Explain cross language interoperability.
- (d) What is the task of Garbage Collector ?

Unit II

2. (a) Explain for each loop with example.
(b) Who is responsible for abnormal termination of a program when an Exceptions Occurs ?
(c) What is Jagged Array ? How it is defined ?
(d) Write a brief note on Boxing and Unboxing.

Unit III

3. (a) Write advantages of using XML.
(b) Define Interface.
(c) What is Enumeration ? Explain with example.
(d) Why is use streams ?

Unit IV

4. (a) What s Event ?
(b) What is Web Form ? Write steps to create empty web form in website.

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- (c) Write difference between client side and server side validation.
- (d) What is Rendering ?

UNIT V

5. (a) What is delegate ?
- (b) What is Data Set ? Why it is used ?
- (c) Briefly explain ADO.NET Architecture.
- (d) What is Data Reader ? Write features of Data Reader class.

SECTION 'C'

12 × 5 = 60

(Long Answer Type Questions)

Note : Answer any two questions from each unit.

Unit I

1. (a) What is .NET Framework ? Explain its architecture.
- (b) What is CLI specification ? Write a brief note on development of .Net.
- (c) Write a brief note on features of .NET.

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Unit II

2. (a) What do you mean by jump statement ? Explain any two jump statement with example.
- (b) What is Exception ? Explain the use of *Try*, *Catch* and *Finally* statement.
- (c) Write benefits of using Visual Studio IDE ? Write steps of create .NET Solution.

Unit III

3. (a) What is XML ? Write a brief note on XML Serialization.
- (b) What is Windows Process ? How we can manage windows process ?
- (c) Write a brief note on file handling. Explain various I/O classes that are used for performing various operations with file.

Unit IV

4. (a) What is validation control ? Explain any 3 controls of ASP.NET used for validation.
- (b) Explain any two standard ASP.NET Control along with its properties.

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- (c) What is difference between classical ASP and ASP.NET ?

Unit V

5. (a) What is ADO.NET ? Explain any one namespace of ADO.NET along with classes available in that namespace.
- (b) Write a brief note on ASP.NET Web Services.
- (c) Briefly explain ASP.NET Data Binding. Write a program to bind SqlData Source to Gridview.

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