Roll No. ....

OLE-97694

BCA 6th Semester (Re-Appear) Examination – April, 2021

INTRODUCTION TO .NET

Paper : BCA-309

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 : Question No. **1** is **compulsory**. In addition to Question No. **1**, attempt *four* more questions, by selecting *one* question from each Unit. All questions carry equal marks.

1. (i) What's the use of Framework Base Classes in .NET environment ?

   (ii) What do you understand by deploying the .NET Runtime ?

(iii) How a number can be converted into a string in C# language ?

(iv) Define the concept of assemblies in .NET environment.

(v) Discuss the usage of Constant members while working with classes in C#.

(vi) Write down the syntax for declaring an abstract method in C# language.

(vii) What is the purpose of using Scope resolution operator ? Give example.

(viii) In a C# program, how visibility of variables can be controlled ? Explain.

UNIT – I

2. (i) Draw a labeled diagram to depict the complete CLR activities for executing a program.

(ii) What do you mean by interoperability ? Explain all the construct of .NET framework that promotes interoperability.

3. (i) What is component model? Explain all the three generation of component model along with their respective applications.

(ii) Define the concepts of Intermedia Language and third party languages in reference to .NET framework.

UNIT – II

4. (i) Enumerate why C# coding is also called as One Stop and Type Safe Coding.

   (ii) Explain the following with appropriate examples: Backslash literals and Reference types.

5. (i) Enumerate with appropriate examples, different data types that are automatically initialized to their default values.

   (ii) How unboxing is useful and also depict how it is achieved ?

UNIT – III

6. (i) Differentiate between associativity and precedence of operators in C#. Also discuss their importance.

   (ii) Syntactically and logically compare the For loop and For Each statement with an apt example for each.

7. What do you understand by message passing between objects in C# language ? Also discuss following categories of class members with appropriate small snippet in C# : Instance & Static members, Data members (fields & events) and function members (constructors & Indexers).

UNIT – IV

8. (i) Define inheritance. How simple inheritance is different from containment inheritance with examples of each type.

(ii) Explain how overriding methods work differently from hiding members in C# inheritance.

9. (i) What are Overload able operators ? List them and also overload a Unary operator of your choice.

(ii) What is Exception hierarchy ? Also explain the use and importance of Catch handler and Finally statement in the context of exception handling.

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