Roll No. ....................

# 97694

## BCA 6th Semester

### Examination – July, 2022

### INTRODUCTION TO .NET

Paper : BCA-309

Time : Three hours ]　　　　　　[ Maximum Marks : 80

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

1. Answer the following :　　　　　　　　　　2 × 8 = 16

   (a) What are abstract classes ?

   (b) What is automatic memory management ?

   (c) What are control constructs in C# ?

   (d) What is function overriding ?

   (e) Why C# is more object-oriented ?

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   (ii) What happens when an exception is caused in an inner try block of a nested try block ?

   (iii) How exception-handling mechanisms can be used for debugging a program ?

9. Explain the following :

   (a) Sealed classes and methods　　　　　　　　8

   (b) Interfaces in C#　　　　　　　　　　　　8

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(f) What is the scope of variables ?

(g) What is metadata in .NET ?

(h) What are constructors in C# ?

## UNIT – I

2. (a) What are web forms ? What are their salient features ? What are the components of a web form ? Illustrate their working.  8

   (b) What is Viual-Studio .Net ? Enumerate its capabilities for C# application development.  8

3. Explain the following :

   (a) .NET Framework  8

   (b) Namespaces in .NET  8

## UNIT – II

4. (a) What is C# ? How is different from Java ? Explain.  8

   (b) What are Class Libraries in C# ? Illustrate.  8

5. Explain the following :

   (a) Data types in C#  8

   (b) Boxing and Unboxing  8

## UNIT – III

6. (a) What is a method in C# ? How a method is invoked in C# ? What is the significance of writing Main method in different ways ? Also give *two* examples where method overloading is applied.  8

   (b) What are various data access methods ? Which data access method is used in .NET and why ? Illustrate its benefits over other methods.  8

7. Explain the following :

   (a) Operator precedence & associativity  8

   (b) for and for each loops  8

## UNIT – IV

8. (a) What is exception handling in C# ? What are the major tasks involved in handling exceptions ? What are the exceptions that occur commonly in C# programs ?  7

   (b) Answer the following :

   (i) Why is proper ordering of catch blocks necessary in C# ?  9