*Roll No.* .....

# 97694

## BCA 6th Semester
## Examination – November , 2018

### 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 :*** Attempt ***five*** questions in all by selecting ***one*** question from each unit. Question No. 1 is ***compulsory***. All questions carry equal marks.

**1.** (a) What is Common Type System ? $2 \times 8 = 16$

(b) What are sealed classes ?

(c) What is function overriding ?

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

(e) What is metadata in .NET ?

(f) What are constructors in C# ?

(g) What are delegates ?

(h) What are interfaces in C# ?

## UNIT – I

2. How .NET technology differs from COM ? What is .NET framework ? What is the relationship between .NET framework and COM/COM+/DCOM ? Illustrate the importance of its building blocks through a diagram. 16

3. Explain the following :
   (a) Architecture of .NET platform 8
   (b) Namespaces in .NET 8

## UNIT – II

4. (a) What is C# ? What are its characteristics ? Explain. 8
   (b) What are various data types supported by C# ? Illustrate. 8

5. Explain the following :
   (a) Boxing and Unboxing 8
   (b) Class Libraries in .NET 8

## UNIT – III

6. What are different types of operators supported by C# ? Chart these operators, discuss their precedence and associativity through suitable examples. 16

7. Explain the following :
   (a) Operator overloading 8
   (b) for and for each loops 8



## UNIT – IV

8. 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 ? Answer the following : 16
   (i) Why is proper ordering of catch blocks necessary in C# ?
   (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) Automatic memory management 8
   (b) Abstract class and methods 8

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