

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 × 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# ?

97694-2,400-(P-3)(Q-9)(18)

P. T. O.

**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

97694-2,400-(P-3)(Q-9)(18) ( 2 )

**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

97694-2,400-(P-3)(Q-9)(18) ( 3 )