AS–1461

B.Sc. (Part–III) Semester—V Examination

COMPUTER APPLICATIONS / INFORMATION TECHNOLOGY

(Programming in C#)

Time : Three Hours]   [Maximum Marks : 80

N.B. :– Attempt all questions.

1. (a) Fill in the blanks :

    (i) All C# applications begin execution by calling the _____ method.

    (ii) C# does not support_____ constructors.

    (iii) Arrays in C# are_____ objects.

    (iv) C# treats the multiple catch statements like cases in a _____ statement.   2

  (b) Choose the correct alternative :

    (i) Inheritance is _____ in nature.

      (a) Commutative

      (b) Transitive

      (c) Associative

      (d) Iterative

    (ii) The point at which an exception is thrown is called the_____.

      (a) Default Point

      (b) Calling Point

      (c) Invoking Point

      (d) Throw Point

    (iii) A local variable _____.

      (a) Can be used anywhere in the program

      (b) Is declared within a method

      (c) Must accept a class

      (d) Represent a class object

(iv) C# supports a technique known as _____ which allows a method to specify explicitly the name of the interface it is implementing.

    (a) Method Implementation

    (b) Implicit Interface Implementation

    (c) Explicit Interface Implementation

    (d) Iterative Interface Implementation   2

(c) Answer the following in **ONE** sentence each :

    (i) What are literals ?

    (ii) What is a Conditional Operator ?

    (iii) What is OOPs ?

    (iv) What is an Interface ?   4

2. (a) Explain the .Net framework in detail.   6

  (b) Explain the environment of C# Programming.   6

OR

3. (a) What are the various characteristics of C# Programming ? Explain in detail.   6

  (b) Explain the origin of .Net Technology.   6

4. (a) What do you understand by comments ? Explain with example.   6

  (b) Explain :

    (i) Constant

    (ii) Scope of variable.   6

OR

5. (a) Explain namespace classes in detail with program example.   6

  (b) Explain the method for initialization and declaration of variable with example.   6

6. (a) Explain :

    (i) Relational Operators

    (ii) Conditional Operators.   6

  (b) Explain if .... else statement with a program example.   6

OR

7. (a) Explain :

     (i) Bitwise Operators

     (ii) Special Operators.   6

   (b) Explain 'for' statement with program example.   6

8. (a) What do you understand by method overloading ? Explain in detail.   6

   (b) Explain array class with program example.   6

OR

9. (a) Explain method invoking in detail.   6

   (b) How strings are inserted using systems ? Explain with program example.   6

10. (a) Explain the difference between classes and structs.   6

   (b) Explain nesting of classes in detail.   6

OR

11. (a) What do you understand by constructors ? Explain in detail.   6

   (b) Explain copy constructor in detail.   6

12. (a) Explain explicit interface implementation in detail.   6

   (b) Explain Delegate and Delegate methods.   6

OR

13. (a) Explain the concept of operator overloading in detail.   6

   (b) Explain multicast delegates in detail.   6