# B.Sc. (Part—III) Semester—V Examination
## COMPUTER APPLICATIONS/INFORMATION TECHNOLOGY
## (Programming in C #)

Time : Three Hours] [Maximum Marks : 80

**Note :—** (1) **ALL** questions are compulsory.
(2) Question No. **1** carries **8** marks and all other questions carry **12** marks.
(3) Assume suitable data wherever necessary.

1. (a) Fill in the blanks : 2

(i) CLR stands for _____.

(ii) < = is an _____ operator.

(iii) A mechanism of giving special meaning to an operator is called _____.

(iv) Mutable strings are also known as _____.

(b) Choose the correct alternative : 2

(i) Which operator among the following signifies the destructor operator ?

(a) : : (b) :

(c) ~ (d) &

(ii) Which of the following is an incorrect statement about delegate ?

(a) A single delegate can invoke more than one method

(b) Delegates could be shared

(c) Delegates are type safe wrappers for function pointers

(d) Delegate is a value type

(iii) Valid size of float data type is :

(a) 10 Bytes (b) 6 Bytes

(c) 4 Bytes (d) 8 Bytes

(iv) Which one of the following statements is correct ?

(a) Array elements can be of integer type only

(b) Default value of numeric array element is zero

(c) Array elements are always sorted by default

(d) Array always initialize in ( ) bracket

(c) Answer the following in **one** sentence : 4

(i) What is String ?

(ii) What is Operator ?

(iii) Define Literals.

(iv) Define Event.

2. (a) Explain characteristics of C # Programming in detail. 6

   (b) Explain .NET framework in detail. 6

**OR**

3. (a) Describe evolution of C #. 6

   (b) Explain benefits of the .NET approach. 6

4. (a) Explain programming structures of C #. 6

   (b) Explain boxing and unboxing in detail with suitable example. 6

**OR**

5. (a) Explain command line argument with suitable example. 6

   (b) What is variable ? How we declare and initialize variable ? 6

6. (a) Explain arithmetic and logical operators. 6

   (b) Explain for each statement with program. 6

**OR**

7. (a) Explain :

   (i) Evaluation of expression

   (ii) Precedence of arithmetic operators. 6

   (b) Explain switch statement with its syntax and example. 6

8. (a) Explain comparing string with example. 4

   (b) Explain finding substrings. 4

   (c) Explain output parameters. 4

**OR**

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

   (b) What is an array ? Explain array list class. 6

10. (a) State and explain difference between classes and structs. 6

    (b) Explain copy constructor with program. 6

**OR**

11. (a) Explain Read Only Member. 4

    (b) What is enumerator ? How to initialize enumerator ? 4

    (c) Explain the concept of properties with example. 4

12. (a) What is operator overloading ? Explain need for operator overloading. 6

    (b) What is delegate ? Explain multicast delegate. 6

**OR**

13. (a) Explain interface and inheritance with suitable example. 6

    (b) Explain :

    (i) Standard numeric format

    (ii) Custom numeric format. 6