AU–142

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

5S : COMPUTER APPLICATION/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 each.

　　　　(3)　Assume suitable data wherever necessary.

1.　(a)　Fill in the blanks :

　　　　(i)　MSIL stands for _____.　　　　　　　　　　　　　　　　½

　　　　(ii)　&& is an _____ operator.　　　　　　　　　　　　　　　½

　　　　(iii)　When object is created _____ method is automatically invoked.　½

　　　　(iv)　_____ method is used to display the output.　　　　　　　½

　　(b)　Choose the correct alternative :

　　　　(i)　Boxing means conversion of value type on stack to a/an _____ type on heap.

　　　　　　(a)　Class　　　　　　　　　(b)　Object

　　　　　　(c)　Unboxing　　　　　　　(d)　Array　　　　　　　　　½

　　　　(ii)　Which of the following is not relational operators in C# .NET ?

　　　　　　(a)　> =　　　　　　　　　　(b)　< =

　　　　　　(c)　= =　　　　　　　　　　(d)　< > =　　　　　　　　½

　　　　(iii)　Which of the following cannot be used to declare interface correctly ?

　　　　　　(a)　Properties　　　　　　　(b)　Methods

　　　　　　(c)　Structures　　　　　　　(d)　Events.　　　　　　　½

　　　　(iv)　Which of the following string method is used to compare current instance with another instance ?

　　　　　　(a)　Compare to ( )　　　　　(b)　Copy ( )

　　　　　　(c)　Compare ( )　　　　　　(d)　Copy to ( )　　　　　　½

(c) Answer the following in one sentence :

    (i)   What is destructor ?

    (ii)  What is namespace ?

    (iii) What is expression ?

    (iv) What is string ?         4

2.  (a) Explain difference between C--- and C#.    6

    (b) Explain benefits of .NET approach.    6

## OR

3.  (a) Explain environment of C# programming.    6

    (b) State and explain various applications provided by C#.    6

4.  (a) Explain constant variables and scope of variable.    6

    (b) What is Maths function ? Explain with syntax example.    6

## OR

5.  (a) What is literals ? Explain various types of literals with example.    6

    (b) What is namespace ? Explain.    6

6.  (a) What is type conversion explain with example ?    6

    (b) Write a program to print even numbers from 1 to 100 in C#.    6

## OR

7.  (a) Explain relational and bitwise operator.    6

    (b) Explain else if ladder with suitable example.    6

8.  (a) How to declare method ? Explain.    6

    (b) Explain pass by value with example.    6

## OR

9.  (a) What is array ? Explain 2-D array with example.    6

    (b) Explain pass by reference with program.    6

10.  (a) Describe basic principles of OOP's.    4

    (b) What is destructor ? Explain.    4

    (c) Explain indexer.    4

## OR

11. (a) Explain enumerator type conversion. 4

   (b) Explain common program error. 4

   (c) Explain nested struct with its syntax. 4

12. (a) Explain overloading binary operators with example. 6

   (b) Explain console input and console output with suitable example. 6

<div align="center">OR</div>

13. (a) What is interface ? Explain implementing interface with example. 6

   (b) What is numeric formatting ? Explain custom numeric format with example. 6