

**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 1 carries 8 marks and all other questions carry 12 marks.

(3) Assume suitable data wherever necessary.

1. (A) Fill in the blanks :

- (i) \_\_\_\_\_ are the non executable statements of a C# program.  $\frac{1}{2}$
- (ii) \_\_\_\_\_ is called automatically whenever an object is destroyed.  $\frac{1}{2}$
- (iii) In operator overloading it is not possible to change \_\_\_\_\_ and \_\_\_\_\_ of an existing operator.  $\frac{1}{2}$
- (iv) \_\_\_\_\_ is used for multiple decision making.  $\frac{1}{2}$

(B) Choose the correct alternative :

- (i) \_\_\_\_\_ is used to convert the result of an expression into desired type.  $\frac{1}{2}$ 
  - (a) typing
  - (b) type casting
  - (c) update
  - (d) change
- (ii) In method overloading the method name is same, but changes must be in,  $\frac{1}{2}$ 
  - (a) Type of arguments
  - (b) Number of arguments
  - (c) Sequence of arguments
  - (d) Any of these
- (iii) \_\_\_\_\_ are just used for Inheritance.  $\frac{1}{2}$ 
  - (a) Abstract class
  - (b) Base Class
  - (c) Derived class
  - (d) None
- (iv) \_\_\_\_\_ is used to take a part of a string.  $\frac{1}{2}$ 
  - (a) copy ( )
  - (b) compare ( )
  - (c) length ( )
  - (d) substring ( )

(C) Answer the following in one sentence :—

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- (i) What is MSIL ?
- (ii) What is (? :) ?
- (iii) What are constants ?
- (iv) What are events ?

**OR**

3. (A) State and explain the characteristics of C#. 6

(B) What is .NET approach ? State and explain its advantages. 6

4. (A) State and explain the structure of C# program. 6

(B) What are the data types supported by C# ? Explain. 6

**OR**

5. (A) What is command line argument ? Explain. 6

(B) Explain :

(i) Default Values

(ii) Reference type

(iii) Constant. 6

6. (A) What are bitwise operators ? Explain. 6

(B) Write a program to check whether Input year is Leap year or No: in C#. 6

**OR**

7. (A) Write a program in C# to print table of a number. 6

(B) How multiple decision making is done in C# ? Explain with example. 6

8. (A) State and explain types of Parameters used in method. 6

(B) Write a program in C# to print transpose of a matrix. 6

**OR**

9. (A) How strings are handled in C# ? Explain with example. 6

(B) Write a program to search a number in an array using sequential search. 6

10. (A) State and explain the difference between structure and class. 6

(B) What is enumerator ? Explain. 6

**OR**

11. (A) What are constructors ? Explain types of constructors. 6

(B) Explain the following :---

(i) this

(ii) static members. 6

12. (A) What are Interfaces ? Explain. 6

(B) What is operator overloading ? Explain. 6

**OR**

13. (A) What are delegates ? Explain. 6

(B) What is an Abstract class ? Explain with example. 6