Roll No.

Total No. of Questions: 13] [Total No. of Pages: 02

## Paper ID [A0410]

(Please fill this Paper ID in OMR Sheet)

M.Sc. (IT - 301) (S05) (New) (Sem. - 3<sup>rd</sup>) C# WITH NET

Time: 03 Hours Maximum Marks: 75

## **Instruction to Candidates:**

- 1) Section A is Compulsory.
- 2) Attempt any Nine questions from Section B.

## **Section - A**

 $(15 \times 2 = 30)$ 

- a) Write the basic applications of C#.
- b) What are preprocessor directives?
- c) Differentiate between class and structure.
- d) Differentiate between partial class and static class.
- e) How do we define interfaces?
- f) Write few operator shortcuts available in C#.
- g) Compare StaticEqual ( ) method and VirtualEqual ( ) method.
- h) How delegates are used in C#?
- i) What is exception hierarchy?
- j) What is console input and console output?
- k) Write about numeric formatting.
- 1) Compare Constant members & Read-only Members.
- m) Discuss the concept of Polymorphism.
- n) How Delegates are declared.
- o) What is General Catch Handler.

## **Section - B**

 $(9\times 5=45)$ 

- Q2) How does C# differ from Java? Compare them with their typical features.
- Q3) How are we controlling the flow of execution within a C# program?
- **Q4)** How do we call constructors from the other constructors?
- **Q5)** Write about the features of the ToString() method and GetType().
- **Q6)** Write about virtual methods and hiding methods of implementation inheritance.
- Q7) How do we add constructors with parameters in a class to a hierarchy.
- **Q8)** Explain how we are converting value types to reference types using casting.
- **Q9)** Write the advantages of multicast delegates.
- Q10) Compare standard numeric format and custom numeric format.
- Q11) Differentiate between Classical Inheritance & Containment Inheritance.
- Q12) Write the syntax of exception handling code and how it is helpful in debugging?
- Q13) Compare Checked & Unchecked Operators.

