

# END TERM EXAMINATION

THIRD SEMESTER [MCA] December 2011

Paper Code: MCA 209

Subject: C# Programming

Time : 3 Hours

Maximum Marks : 60

Note: Q. No. is compulsory. Attempt one question from each Unit

Q1.

- a) what is CLR? Explain the role of CLR in the Dot Net Framework? (2X10=20)
- b) what is the difference between c++ and c#?
- c) what are the fundamental differences between value types and reference types?
- d) What is Partial Class?
- e) What is sealed Class? Explain with example.
- f) What is the use of static constructor in c#?
- g) What is inclusion polymorphism?
- h) What's the purpose of finally block in try..catch?
- i) How LINQ is beneficial than Stored Procedures?
- j) Why select clause comes after from clause in LINQ?

## Unit –I

- Q2. a) What are the advantages of CLR? (5)  
b) What is assembly? (5)

- Q3. a) Explain common language infrastructure, common type system and common language specification? (5)  
b) Why .Net Platform independent? (5)

## Unit II

- Q4 a) Explain jagged array, Array list and Bit Array? (4)  
b) Difference between dispose and finalize methods? (3)  
c) why the MAIN() method is Static? (3)

- Q5. a) What is the difference between keywords var and dynamic? Explain with example. (4)  
b) what is compile time and run time polymorphism? Explain with example. (4)  
c) What is specialization and generalization? (2)

## Unit III

- Q6. a) Explain why function pointer in C is not but .Net delegates are type safe? (3)  
b) What is XAML? (3)  
c) What is Dictionary? Why are the calculated hash values should be evenly distributed between int.minValue and int.MaxValue? (4)

- Q7. a) Explain how creating application using WPF is better than windows forms? (4)  
b) What is Stack Collection? Explain following methods of Stack Collction. (6)

- i. Clear()      ii. Peek()      iii. Contains()      iv. Pop()      v. Copyto()

**Unit -IV**

- Q8. a) What is the benefit of using LINQ on dataset? (5)  
b) What is Quantifiers in LINQ? (5)
- Q9. a) What are extension methods in C#? Explain with example. (5)  
b) What is Data Context? Explain with example. (5)

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