

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)
