MCAE-26 **Roll No.:** | | | | | | | | | | |

MCA
(SEM V) ODD SEMESTER EXAMINATION 2015-16
DOT NET FRAMEWORK & C#

[TIME: 3 hrs.] **[Max. Marks: 100]**

Note: ***Attempt All Questions. All Question carry equal marks.***

Q.1 Attempt any FOUR question. **(4x5=20)**

- **a)** What is Dot Net Framework and Describe managed code execution process with figure?
- **b)** Describe managed code execution process with figure?
- **c)** Define framework base classes .What are the benefits of a uniform type system in c#?
- **d)** Explain the feature "Garbage Collection".
- **e)** Compare .NET framework with Java Environment.
- **f)** Define the following with example.
  - i) DLL Hell Problem
  - ii) Common Type System

Q.2 Attempt any FOUR question. **(4x5=20)**

- **a)** Define Arrays in C#. What are the types of arrays in c#? What are the steps needed to create an array? Explain the Jagged Array in details.
- **b)** How to prevent a class from being inherited? Explain.
- **c)** Is multiple inheritance possible in .NET? How to implement multiple interfaces in C#?
- **d)** What is the difference between System.Array.CopyTo() and System.Array.Clone().
- **e)** Simulate a calculator in C# using delegate.
- **f)** What are events? Write a small program in C# that demonstrates the "key press" events.

Q.3 Attempt any TWO question. **(2x10=20)**

- **a)** What is thread? How can we create and start a thread in C#? Explain the main properties of the thread in C#.
- **b)** Define socket How socket programming is done in C#?
- **c)** What is Exception Handling? How is it done in C#? Explain about the throwing exceptions.

Q.4 Attempt any TWO question. **(2x10=20)**

- **a)** What are Windows services? What different editors can you use to create a windows installer package using Visual Studio?
- **b)** What are web services? Create a Window client application that uses the Web service to reserve a seat in the cinema.
- **c)** Write the short notes on any two:
  - (i) Unsafe Mode
  - (ii) GDI+(Graphical Devices Interface) classes in C#
  - (iii) Distributed application is created in .Net framework

Q.5 Attempt any TWO question. **(2x10=20)**

- **a)** What is the Generic? How to create your own generic types, including classes, interfaces, methods and delegates.
- **b)** Define the attribute and define Built-in-attribute and Custom attribute. How to create custom attributes.
- **c)** Difference between private and shared assembly. How to create shared assemblies by creating a key file and signing the project to create a strong name for the assembly.