Printed Pages—3   **MCA512**

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2144 **Roll No.** [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

M.C.A.

(SEM. V) THEORY EXAMINATION 2011-12

DOT NET FRAMEWORK AND C#

Time : 3 Hours   *Total Marks : 100*

Note :– Answer **all** questions. All questions carry equal marks.

1. Attempt any **four** parts of the following :   **(5×4=20)**

   (a) Briefly discuss the .Net class library.

   (b) Explain the different web services available with .Net framework.

   (c) Explain the concept of unified classes. How is it used ?

   (d) Describe the managed execution process.

   (e) What are the different applications that we can develop with C# ? Also explain the structure of a C# program.

   (f) Compare assemblies in .Net framework with COM objects.

2. Attempt any **four** parts of the following :   **(5×4=20)**

   (a) What do you mean by the polymorphism ? How do you achieve it in C# ?

   (b) What are events ? Write a small program in C# that demonstrates the "key press" events.

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(c) Explain the different types of inheritance available with C# language with help of examples.

(d) Explain the differences between function overloading and function overriding with the help of suitable examples.

(e) What is an abstract class and interface ? Illustrate through an example.

(f) Simulate a calculator in C# using delegate.

3. Attempt any **two** parts of the following :   (10×2=20)

(a) Explain the process used to develop a MDI windows forms C# application. What are the different types of dialogs can be used with such an application ?

(b) Explain the various stages of webform life cycle.

(c) Discuss the advantages and disadvantages of exception handling in C# and contrast them with a primitive error. Also discuss the handling technique in which, each called method returns an error code and that must be tested by the caller.

4. Attempt any **two** parts of the following :   (10×2=20)

(a) What are Windows services ? Name some windows services that can be developed with the help of C# and write down the steps to develop a window service.

(b) Write short notes on any **two** :

   (i) Unsafe Mode

   (ii) GDI + (Graphical Devices Interface) classes in C#

   (iii) ADO.Net.

(c) (i) What are web services ? Explain its architecture. What are asmx files ?

   (ii) How a distributed application is created in .Net framework ?

5. Write short notes on any **two** of the following : **(10×2=20)**

   (a) .Net assemblies feature and structure.

   (b) Built-in-attribute and Custom attribute.

   (c) Generic.