Printed Pages : 3

MCA-512

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

PAPER ID : 214505

Roll No. ⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚

M.C.A.

(SEM. V) (ODD SEM.) THEORY EXAMINATION, 2014-15

.NET FRAMEWORK & C#

Time : **3 Hours]**   [Total Marks : **100**

1   Attempt any **four** questions :   **(5×4=20)**

(a)   Enumerate major services provided by the CLR.

(b)   Define inter-operability. How does .Net framework achieve this feature ?

(c)   Discuss CLR activities for program execution with flow chart diagram.

(d)   Differentiate between "managed code" and "unmanaged code".

(e)   What is Just-In-time Compilation ? How it is using in connection with Intermediate Language ?

2   Attempt any **two** questions :   **(10×2=20)**

(a)   Create a base class called Shape. Use this class to store two double type values that could be used to compute the area of figures

-       Derive two specialized classes called Triangle and Rectangle from the base Shape.

214505]   1   **[Contd...**

- Add to the base class, a method "Set" to initialize base class data members and another method "Area" to compute and display the area of figures.
- It is mandatory to implement the method Area in Derived class.

Design a Program that will accept dimensions of a triangle or rectangle interactively and display the area.

(b) Enumerate the steps involved in creating and using a delegate with an example.

(c) Discuss compile time Polymorphism in C#. Write a program to overload == operator for the complex class.

3   Attempt any **two** questions :   **(10×2=20)**

(a) What are the types of stream in C# ? Write a program in C# to copy the data from one file to another.

(b) What is multi-threading ? Write a program for creating and starting a thread.

(c) Write a program that will read a name from the keyboard and display it on screen. The program should throw an exception when the length of the name is more than 15 characters. Design your own exception mechanism.

4   Attempt any **two** questions :   **(10×2=20)**

(a) Explain the following parts of ASP.Net web application.
  (i)   Web Forms or .aspx pages
  (ii)   Code-behind pages
  (iii) Configuration files
  (iv) Global.asax file

(b) What are the new features in Graphical Device Interface Plus (GDI+) ? Explain them in detail. Differentiate between GDI and GDI+.

(c) Discuss in detail about WSDL, UDDI, SOAP and the concept behind Web Services.

5   Attempt any **two** questions :   **(10×2=20)**

(a) What do you understand about .Net Assemblies ? What is the difference between Private and Shared Assemblies ?

(b) What do you mean by attribute ? Discuss built-in attribute and Custom attribute.

(c) Write a program to connect a SQL server database with a Windows Form Application made in C#. Explain the necessary steps to deploy such an application.