

USN

13MCA53

## Fifth Semester MCA Degree Examination, Dec.2017/Jan.2018

### Programming using C# •NET

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and / or equations written e.g.  $42+8 = 50$ , will be treated as malpractice.

1. a. Explain benefits of .NET framework. (10 Marks)  
b. Write a C# program to find sum of two matrices. (10 Marks)
  
2. a. Explain partial classes and partial methods, with the help of a program. (10 Marks)  
b. Explain array of objects with the help of a program. (06 Marks)  
c. Write a C# program to explain boxing and unboxing. (04 Marks)
  
3. a. Write a C# program to explain accessor and mutator and properties used in encapsulation. (10 Marks)  
b. Write a C# program to explain interface inheritance and implementation of interfaces. (10 Marks)
  
4. a. Write a C# program to calculate square of numbers using delegates. (06 Marks)  
b. Write a C# program to demonstrate abstract class and abstract methods. (08 Marks)  
c. Write a C# program using try, catch, finally to explain check overflow using checked and unchecked statements. (06 Marks)
  
5. a. Using windows forms, write steps to create a simple event driven GUI. (06 Marks)  
b. Using windows forms, write steps to work with date time picker control. (06 Marks)  
c. Using windows forms, write steps to work with mouse to draw on a form that explains mouse event handling. (08 Marks)
  
6. a. Write steps to create a connection to a database using SQL server database. (10 Marks)  
b. Explain data access with ADO.NET by writing steps to update a data source with the help of data adapter. (10 Marks)
  
7. a. Explain Web application development with ASP.NET by writing steps to explain validation controls. (10 Marks)  
b. Write steps in session tracking with http session state using cookies. (10 Marks)
  
8. Write short notes on :  
a. Managed and unmanaged code  
b. CLS  
c. CTS  
d. MDI forms. (20 Marks)

\* \* \* \*