- (b) Elaborate how Authentication can be accomplished by using .Net Passport facility.
- **9.** (a) What are Web Services ? Elaborate how these services are created and invoked.
  - (b) What is the role of validation Controls on Web forms? Explain any *four* such validations with examples.

Roll No. .....

# 67241

# MCA 5th Semester (With New Notes) (Non CBCS) Examination – December, 2018

## **ADVANCED TECHNOLOGY**

Paper: MCA-501

Time: Three Hours]

[ Maximum Marks: 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note: Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

- 1. (a) Define Web Services.
  - (b) What do you mean by the Third Party Language? Give any *two* examples.
  - (c) Show the evolution of C# language diagrammatically.
  - (d) What are the type safe and version able feature of C# language?

- (e) What is automatic type conversion and narrowing in reference to type conversion?
- (f) Name different types of Data reader used in ADO.NET.
- (g) Discuss how a complete list can be copied to another by using an inbuilt arraylist function.
- (h) How sealed classes are used in C# programming language?

### UNIT - I

- **2.** (a) What is the role of .NET experience services and .NET framework in .NET platform.
- (b) What is Common Language Runtime? List down different services provided by Common Language Runtime.
- **3.** (a) Define interoperability. How it makes the C# language so popular and efficient for Web based applications?
  - (b) Define assemblies. Describe the procedure of creating an assembly.

### UNIT - II

**4.** (a) What do you mean by Verbatim strings, also give examples? Discuss how mutable and immutable strings are implemented in C# language. One example of each type is required

- (b) What do you understand by the method modifiers? Give the description of over ride, sealed, extern and virtual method modifiers.
- **5.** (a) Explain how visibility control can be implemented at class and member level along with accessibility constraints.
  - (b) Why interfaces are used in C#? Explain how it can be extended and implemented in C#?

### UNIT - III

- **6.** (a) Write an explanatory note on the features of ADO.NET making it suitable for managing the voluminous data.
  - (b) What are the major components of Data Provider? Explain their respective functioning in data management.
- **7.** (a) Differentiate between the Typed and Untyped dataset with appropriate examples.
  - (b) Why Data Binding is important in managing the data? Explain different types of data binding.

### UNIT - IV

**8.** (a) What are the differences between Client Side and Server Side State Management?

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