- **7.** (a) Discuss how the given data can be filtered and sorted using the data connection.
 - (b) Explain different components of dataset object with their respective description and their purpose.

UNIT - IV

- **8.** (a) List down the differences between page level and application level error handling with appropriate segment of code in ASP.NET.
 - (b) Name the protocol which is stateless protocol and discuss how client side state management options are implemented?
- **9.** (a) Discuss the use of Range Validator in ASP.NET and also mention how it helps in authenticating the data provided by the user?
 - (b) Define Web service and explain different components of it in detail.

Roll No.

67241

MCA 5th Semester (With New Notes) Examination – May, 2018

ADVANCED TECHNOLOGY (New)

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: Question No. 1 is *compulsory*. In addition to Question No. 1 attempt any *four* more questions by selecting *one* question from each Unit.

- **1.** (a) List any four third party languages supported by C#.
 - (b) What do you understand by Versioning support feature of .NET and C#?
 - (c) Discuss the syntax of foreach loop provided by C#.

- (d) What is implicit type casting? Give any *two* examples.
- (e) What does the fall through mean in C# language in reference to Switch statement?
- (f) Name different types of method parameters provided by C# language.
- (g) Define polymorphism and discuss its benefits in designing a program.
- (h) Briefly explain different window controls (VB.NET or C#).

UNIT - I

- **2.** (a) Discuss the strategy followed in designing the .NET framework and also briefly discuss different components of Microsoft .NET platform.
 - (b) Illustrate in detail the architecture of .NET framework including its different components and their respective roles.
- **3.** (a) What are assemblies? Discuss its types and the process of defining an assembly as per user requirements.

(b) Enumerate how MSIL is associated to managed code generated in .NET environment.

UNIT - II

- **4.** (a) Describe the complete stages of code transformation process while executing a C# program.
 - (b) Illustrate the syntax of declaring and invoking a static method in C# language.
- **5.** (a) What are jagged arrays? Declare a variable size array of your choice and also differentiate it from rectangular arrays.
 - (b) What do you understand by Multicasting and discuss the events associated to it?

UNIT - III

- **6.** (a) Briefly introduce the ADO.NET object model by explaining the key components of it with the help of a labelled diagram.
 - (b) List different ways of accessing data in ADO.NET and describe anyone of it in details.