

Roll No. ....

**67241**

**MCA 5th Sem. (Non CBCS Scheme)  
Examination – May, 2019**

**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 :** Question No. 1 is *compulsory*. In addition to Question No. 1, attempt *four* more questions by selecting at least *one* question from each Unit. All questions carry equal marks.

1. (i) How interoperability feature in useful ?
- (ii) What do you understand by Intermedia language ?
- (iii) Explain the concept of Component based software development.
- (iv) Show the evolution of C# language diagrammatically.
- (v) How further inheritance of a class can be restricted in C# language ?

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- (vi) What role does destructor play in ADO.NET environment ?
- (vii) What are overriding methods along with the concept of hiding methods ?
- (viii) Why it is advantageous to use data grid for manipulating the data ?

**UNIT – I**

2. (i) What is .NET platform ? Explain its different components making it different from other programming environment.
- (ii) How COM technology is different from OLE technology ? Explain.
3. (i) Explain the following : JIT, CTS, CLS & Framework Base classes.
- (ii) Define assemblies. Describe the procedure of creating an assembly.

**UNIT – II**

4. (i) What do you understand by the method modifiers ? Give the description of override, sealed, extern and virtual method modifiers.
- (ii) What is the difference between System. Array and Array List class ? Mention four properties and four functions for each type of class.
5. (i) Enumerate the implementation and usefulness of overloaded and static constructors in C# language.
- (ii) Differentiate between constant members & read only members and between properties & indexers with appropriate examples.

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**UNIT – III**

6. (i) Write down how ADO.NET supports the Data caching in datasets.
- (ii) Explain the architectural object model of ADO.NET with the help of labeled diagram.
7. (i) What is the role of Currency manager to navigate between records ? Explain with the help of diagram.
- (ii) Discuss how data adapter helps in establishing a connection with database. Explain the complete process of creating the data adapter.

**UNIT – IV**

8. (i) What is State management ? Explain different categories in which State management can be classified.
- (ii) Briefly discuss the anatomy of ASP.NET.
9. (i) What are the advantages of using Web Services ? Also mention different core elements of it.
- (ii) What do you mean by Authentication Controls ? Explain any two such controls with their respective formats.