Advanced Web Technology and DotNet

QUESTION BANK

Unit – 1 Introduction to .NET Framework

- 1. What is .NET Framework? What are the advantages of .NET?
- 2. Difference between JAVA and .NET.
- 3. What is CLR? Explain program execution life cycle of .NET.
- 4. Why CLR is called as a heart of .NET.
- 5. What are the features supported by CLR?
- 6. What are the main components of .NET Framework?
- 7. What is JIT? Explain types of JIT.
- 8. What is FCL? Explain any five libraries supported by .NET.
- 9. What is CLS? Explain with example.
- 10. What is CTS? Explain with example.
- 11. What is MSIL/ Managed Code?
- 12. Difference between Managed and Unmanaged Code.
- 13. What is Assembly? Explain components of Assembly.
- 14. What are the different types of Assemblies in .NET?
- 15. What is Metadata and Manifest?
- 16. Private Assembly v/s Shared Assembly
- 17. Different types supported by .NET.
- 18. What is GAC?
- 19. How GC works in .NET?
- 20. What are the security features supported by .NET?
- 21. How .NET is called platform and processor independent?
- 22. What are the open standards supported by .NET?
- 23. What is AppDomain in .NET? Give any two advantages.

Unit – 2 OOP C# / Unit – 3 Databases and C#

- 24. Justify the statement "C# is fully object oriented language".
- 25. Any three OOP features supported by C#.
- 26. Any five data types in .NET with its CTS types.
- 27. What is the difference between type conversion and type casting?
- 28. What is Boxing and Unboxing?
- 29. Types of operators supported by .NET
- 30. Control Statement in C#.
- 31. What is Structure? Class v/s Structure
- 32. Array v/s Structure
- 33. Types of Array in C#.
- 34. Any five properties of System. Array class.
- 35. What is Jagged Array?
- 36. What is collection? Types of Collection in C#.
- 37. Generic v/s Non Generic Collection
- 38. Array v/s ArrayList
- 39. Array v/s Collection
- 40. All the collection belongs to which namespace?
- 41. Difference between Stack and Generic Stack.
- 42. Any five methods of String Class.
- 43. Any five methods of Date Class.
- 44. How to find a Day and Month from the given date?
- 45. Access modifiers supported by C#.
- 46. Explain constant with its features.
- 47. Types of fields in C#.
- 48. Constant v/s Static
- 49. What is Constructor and types of constructors in C#
- 50. Different ways of passing parameters in C#.
- 51. Pass by value v/s Pass by reference
- 52. Rules for declaring and passing parameter array in C#.
- 53. Pass by reference v/s Output parameter
- 54. Explain constructor overloading and constructor overriding.

- 55. Features of private constructor.
- 56. Features of static constructor in C#.
- 57. Class v/s Static Class
- 58. What is Operator overloading? Which operators are not overloaded in C#.
- 59. Rules for overloading operators.
- 60. What is property and advantages to create properties in C#?
- 61. How to create readonly property?
- 62. Properties v/s Fields
- 63. Properties v/s Methods
- 64. What is inheritance? Importance of inheritance
- 65. Types of inheritance
- 66. How the default constructor called in multilevel inheritance.
- 67. How can you change the execution sequence of parameterized constructor in inheritance?
- 68. Which keyword is used to access hidden members of base class.
- 69. What is sealed class?
- 70. Explain 'virtual' and 'override' keyword.
- 71. Rules for declaring virtual methods in C#.
- 72. What is Abstract Class and Abstract method?
- 73. Virtual Method v/s Abstract method
- 74. What is interface? Rules for declaring interface.
- 75. Rules for declaring try, catch and finally block.
- 76. Role of throw keyword in exception handling.
- 77. Any three exceptions occurred in C#.
- 78. All the exceptions are derived from which class.
- 79. Sequential v/s Random Access File
- 80. Any five I/O classes.
- 81. Explain StreamReader and StreamWriter
- 82. Explain StringReader and StringWriter
- 83. Write a syntax to create and write file.
- 84. Which methods are used to get drives and directories in C#?
- 85. Any three methods of Path Class.

- 86. Which method is used to read random character of the file?
- 87. What is Generics in C#?
- 88. Advantages to create generic methods in C#.
- 89. What is Serialization and Deserialization in C#?
- 90. Types of Serialization in C#.
- 91. Which classes are used to serialize the objects in C#?
- 92. Which attributes are used to prevent Binary Serialization and XML Serialization?

Unit – 4 Web Applications in ASP.NET

- 93. Any five features of ASP.NET
- 94. Elements of ASP.NET page.
- 95. Any three directives of ASP.NET Page.
- 96. What is inline code and inline expression?
- 97. Events of Page Life Cycle.
- 98. What is postback page and round trip?
- 99. How to detect postback page?
- 100. What is Cross Page posting and how to detect it?
- 101. Explain Compilation process and types of compilation process in ASP.NET.
- 102. What is dynamic compilation?
- 103. Types of controls supported by ASP.NET.
- 104. Any five common properties supported by ASP.NET controls
- 105. Difference between Label and Literal control.
- 106. Explain AutoPostBack property.
- 107. Any five properties of Image map control.
- 108. Any five properties of Calendar control.
- 109. What is Validation? Explain types of validation in ASP.NET.
- 110. Types of Validation controls in ASP.NET.
- 111. Any five properties of Base Validator class.
- 112. Which property is used to fire client side and server side validation both?
- 113. Explain Page.IsValid property.
- 114. Explain ValidationGroup property with example.
- 115. What are the different ways to render error messages?

- 116. Any two validation control with example.
- 117. Use of Adrotator control. Explain it with properties.
- 118. Different objects of .NET Data providers.
- 119. Which namespace is used to include Sql Data provider?
- 120. Connected Environment v/s Disconnected Environment
- 121. Connection class with five properties.
- 122. What is Dataset?
- 123. Data Reader v/s Dataset
- 124. Use of command class with its properties and methods.
- 125. Different DataSource controls supported by ASP.NET.
- 126. Use of SqlDataSource control with properties and methods.
- 127. Types of parameters supported by SqlDataSource Control.
- 128. Types of Data Access Controls in ASP.NET.
- 129. Any three list controls with its properties.
- 130. Properties and methods of Gridview control.
- 131. Templates supported by Gridview control.
- 132. Different fields supported by Gridview control.