Question Paper Code: 49209

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

Elective

Computer Science and Engineering

14UCS909 - C# and .NET FRAMEWORK

(Regulation 2014)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Select the relevant output for the following set of code
   ```
   static void Main(string[] args)
    {
   byte varA = 10;
   byte varB = 20;
   long result = varA & varB;
   Console.WriteLine("{0}  AND  {1} Result :{2}", varA, varB, result);
   varA = 10;
   varB = 10;
   result = varA & varB;
   Console.WriteLine("{0}  AND  {1} Result : {2}", varA, varB, result);
   Console.ReadLine();

    }
   ```

   (a) 0, 20   (b) 10, 10   (c) 0, 10   (d) 0, 0

2. What does the term 'immutable' means in term of string objects?

    (a) We can modify characters included in the string
    (b) We cannot modify characters contained in the string
    (c) We cannot perform various operation of comparison, inserting, appending etc
    (d) None of these

3. The capability of an object in C sharp to take number of different forms and hence display behavior as according is known as

    (a) Encapsulation   (b) Polymorphism

    (c) Abstraction   (d) None of these

4. A type of class which does not have its own objects but acts as a base class for its subclass is known as

    (a) Static class   (b) Sealed class   (c) Abstract class   (d) None of these

5. What is the name of the property of ASP.NET page that you can query to determine that a ASP.NET page is being requested not data being submitted to web server?

    (a) FirstGet   (b) Initialized   (c) IncludesData   (d) IsPostBack

6. Syntax for closing and opening the connection in ADO.net is

    (a) sqlconn.Open( ) and sqlConn.close( )   (b) sqlConn.open( ) and sqlConn.Close( )

    (c) sqlConn.Open( ) and sqlConn.Close( )   (d) None of these

7. In ASP.NET application DLL files are stored in

    (a) APP_Code   (b) APP_Data

    (c) Bin   (d) APP_LocalResources

8. Application_Start event is available in which file?

    (a) Global.asax   (b) Local.asax

    (c) Web.config   (d) None of these

9. Contents of assembly file can be investigated using

    (a) ILDASM.exe   (b) ILDASM.dll

    (c) ILDASM.inc   (d) ILDASM.aspx

10. The property signifies "Obtains a Module object that represents the module (an executable file) in which the reflected type resides". Choose the property which specifies the following statement:

    (a) Type DeclaringType   (b) int MetadataToken

    (c) Module Module   (d) Type ReflectedType

PART - B (5 x 2 = 10 Marks)

11. Define variable size array.

12. What is delegate? List the steps involved in creation and usage of delegates.

13. Define Data Set and Data Reader.

14. What is Web services.

15. Distinguish the two types of attributes in .NET.

PART - C (5 x 16 = 80 Marks)

16. (a) Explain in detail about Operators in C# programming language with suitable example. (16)

Or

(b) Demonstrate method overloading in C# with suitable example program. (16)

17. (a) Briefly describe the exception handling mechanisms in C# with proper example program. (16)

Or

(b) Develop a program in C# for calculating tax or IT and ST using classes salestaxcalculator(itemname, itemprice,calculatetax(), display()), Incometax(ename, totsaalry, taxableincome, display()) along with abstract class TaxCalculator(tax), abstract method calculateTax(). (16)

18. (a) Write a database application to display the details of employee table details in a data grid control using ADO.NET. (16)

Or

(b) Explain in detail about Multiple Document Interface and how to create menu using Multiple Document Interface in .NET. (16)

19. (a) (i) How to create XML File? Explain it with example. (8)

(ii) Summarize the validator controls and their applications in ASP.NET. (8)

Or

(b) (i) Illustrate the steps to create a web application in C# using ASP.NET. (8)

(ii) Explain the advantages of a Web Forms based web applications. (8)

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20. (a) Develop a program to create threads for the functions of printing multiple of 5 upto 10000 and even numbers in descending order in the range 1-10000. (16)

Or

(b) Explain the concept of reflection with an example program. (16)

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