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Question Paper Code: 39209

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

Elective

Computer Science and Engineering

01UCS909 - C# AND .NET FRAMEWORK

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - $(10 \times 2 = 20 \text{ Marks})$

- 1. Apply boxing and un-boxing to an integer value.
- 2. Compare structure with class.
- 3. Define sealed classes and mention their use.
- 4. Compare and contrast abstract class and interfaces.
- 5. List out the different types of applications that can be created on .net.
- 6. Define data adapter.
- 7. Describe the procedure involved with database connectivity.
- 8. Describe the database connection string using web.config file.
- 9. Distinguish between marshal by value and marshal by reference.
- 10. What is the purpose of WSDL? How will you view WSDL file?

PART - B (5 x 16 = 80 Marks)

- 11. (a) (i) List and Explain the Characteristics of C#. (10)
 - (ii) Explain in detail about checked and unchecked operators in C# with examples.

(6)

Or

- (b) Explain in detail about checked and unchecked operators in C# with examples. (16)
- 12. (a) (i) Describe in detail about interfaces. (8)
 - (ii) Recommend a class polar which describes point in the plane using polar coordinates, radius and angle. A point in polar coordinates is shown below. Include an overloaded operator method to add two objects of polar.

$$X = r * cos(a), Y = r * sin(a), a = atan(y/x), r = sqrt(x * x + y * y).$$
 (8)

Or

- (b) (i) How do you hide a method and override a method? Explain with suitable examples. (8)
 - (ii) Compare abstract and sealed classes. (8)
- 13. (a) Discuss about ADO.NET architecture. Build a windows based applications to accept the reservation details of a train ticket and to store the details in a database table. Use drop down list box to choose the train number and name. Accept source and destinations in text boxes. Allow the user to enter the date of journey one month in advance. (16)

Or

- (b) Apply the methods available for window based applications and build an application to accept the reservation details of a train ticket and to store the details in a database table. Use drop down list box to choose the train number and name. Accept source and destinations in text boxes. Allow the user to enter the date of journey one month in advance. Assume that in each train, there are thirty tickets and every booking should have a unique number. (16)
- 14. (a) Explain with an example working with XML and .Net. (16)

(b)	Describe the steps in creating web services in .NET technology.	(16)
15. (a)	Develop an application which requires simple and compound marshalling, how these are performed.	Explain (16)
		Or	
(b)	Explain in detail about Security in .Net Framework.	(16)