Question Paper Code: 31268

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

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. State some of the new features that are unique to c# language.
- 2. What is the significance of MSIL?
- 3. List the operators that cannot be overloaded.
- 4. Illustrate with an example the call to a base class constructor from a derived class.
- 5. List out the different types of applications that can be created on .net.
- 6. Define data adapter.
- 7. How to add the server-side controls to web form?
- 8. Describe the procedure involved with database connectivity.
- 9. List out the four task of reflections.
- 10. Define multi module assemblies.

PART - B (5 x
$$16 = 80 \text{ Marks}$$
)

(8)

(8)

- 11. (a) (i) Explain the execution model of the .NET framework.
 - (ii) With an example define boxing and unboxing.

	(b)	(i) Describe the components of the .NET framework and explain the features of each component. (8)
		(ii) With suitable illustration explain the scope of each category of the variables. (8)
12.	(a)	Consider a student class with feet and inches as attributes which describes the height of the student. Write a C# program to overload the + operator and to find the average of N students.
		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)	Write a windows application in C# for emulating a very basic calculator that performs addition, subtraction, multiplication and division operations. (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 the steps in developing web services with suitable example. (16)
		Or
	(b)	(i) Explain in detail about the lifecycle of a web forms. (8)
		(ii) Explain about exception handling in ASP.NET. (8)
15.	(a)	Develop an application which requires simple and compound marshalling, Explain now these are performed. (16)
		Or
	(b)	(i) Write about the typical uses of reflection. (8)
		(ii) What are Security Policies? How .NET applies security policies? (8)