SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E – CSE
Title of the paper: C# and .NET
Semester: V   Max.Marks: 80
Sub.Code: 511502-611502   Time: 3 Hours
Date: 24-04-2009   Session: AN

PART – A   (10 x 2 = 20)
Answer All the Questions

1. Mention any two key aspects in which .NET platform is advantageous over other languages.

2. With example, explain the declaration of enumerated type variables in C#.

3. What are the constructs used in C# for garbage collection? Give example.

4. What is shallow and deep copying? Explain with the suitable methods.

5. Mention any four properties of control class and explain.

6. How can menus be created manually?

7. Mention any two properties of CheckBox control and explain.

8. What are stream classes? Give example.

9. What are the design goals of ADO.NET?

10. What is the use of GET and POST methods in web applications?

PART – B   (5 x 12 = 60)
Answer All the Questions

11. (a) Discuss in detail the architecture of .NET framework with a neat block diagram.   (10)
    (b) What is JIT? What are its advantages?   (2)

(or)

12. (a) Write a C# code to demonstrate string operations like finding the length, concatenation of two strings, finding the number of occurrences of a given character in a string. Make use of appropriate member functions and modularize the code. (10)

(b) Explain the creation and usage of custom namespaces. (2)

13. Substantiate with examples and explain how the following concepts have been implemented in C#. (3 x 4 = 12)
    (a) Encapsulation
    (b) Inheritance
    (c) Exception handling

(or)

14. What is the use of Collection in C#? With a sample code, explain the System. Array class and its utilities.

15. Explain the properties of scrollable controls in a form with example code segment.

(or)

16. What are MenuStrip and ToolStrip? Compare them with the steps needed for the manual creation the menus and toolbars.

17. What are the classes associated with file dialog? With sample code, explain the properties related to file dialog classes.

(or)

18. With suitable example, explain the properties and events related to the following: (3 x 4 = 12)
    (a) RadioButton
    (b) TextBox
    (c) ComboBox

19. (a) Explain the classification of the basic classes in ADO.NET.

(b) Write a C# code that uses DataReader class to issue query to read data from a dataset.

(or)

20. Discuss the steps required to create a web application in C#.