SVKM'S
Mithibai College of Arts, Chauhan Institute of Science &
Amrutben Jivanlal College of Commerce and Economics (Autonomous)
Academic Year (2022-23)
Class:S.Y.B.Sc.   **Semester: IV**

Program: B.Sc. Computer Science   Max. Marks: 75
Course Name: .NET Technologies   Time:
Course Code: USMACS406   Duration: 2 hrs 30 minutes
Date:

REGULAR EXAMINATION

<u>Instructions:</u> **Candidates should read carefully the instructions printed on the question paper and on the cover of the Answer Book, which is provided for their use.**

1) This question paper contains 2 pages.
2) All Questions are compulsory.
3) Answer to each new question to be started on a fresh page.
4) Figures in brackets on the right hand side indicate full marks.
5) Assume Suitable data if necessary

Q-1   Attempt any THREE Questions :   **(21)**

a)   How does Common Language Runtime impact .NET Framework ?   (7)

b)   Draw the diagram to depict when a page is requested and rendered and explain the steps.   (7)
       Also write about Page directive code.

c)   Discuss different class accessibility options available in C#. Create a class and a constructor   (7)
       for the class. Create an object for the class.

d)   Explain passing parameter by value and by reference in functions with the help of a coding   (7)
       example in C#.

Q-2   Attempt any THREE Questions :   **(21)**

a)   How is information passed through query strings ? Explain with the help of a coding   (7)
       example. Also write about URL encoding.

b)   Give at least 7 types of errors made by the user during data entry. Suggest ways to avoid   (7)
       them.

c)   What is AdRotator Control ? Write the XML file which is created for the AdRotator   (7)
       Control.

d)   List at least 7 web control classes with their equivalent HTML elements. Also write the   (7)
       functionality of every control.

Q-3 **Attempt any THREE Questions :** (21)

a) Draw the ADO.NET architecture diagram and explain about the two ways of accessing the data from back end. (7)

b) Write functions to insert a record and retrieve the contents of a SQL table using disconnected architecture (7)

c) What is Single-value Data binding ? Incorporate Single-value data binding and display different types of information on the web page. Also write the problems in single-value data binding (7)

d) Assume an XML file which stores information about students. Create that file using XMLTextWriter and related classes. (XML Tree should have a depth of at least 4). (7)

Q-4 **Attempt any THREE Questions :** (12)

a) Write a note on .NET languages and Intermediate Language (4)

b) List any 4 derived classes of HtmlInputControl class. (4)

c) Write down the steps to query information from a table with simple data access. (4)

d) Write at least 4 generic properties of a web control (4)