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MANIPAL INSTITUTE OF TECHNOLOGY
(Constituent Institute of Manipal University)
MANIPAL-576104

VII SEMESTER B.TECH.(COMPUTER SCIENCE AND ENGINEERING) DEGREE
END-SEMESTER EXAMINATION-NOVEMBER/DECEMBER 2014
SUBJECT: ADVANCED INTERNET TECHNOLOGY (CSE 403)
DATE: 03-12-2014

TIME: 3 HOURS MAX.MARKS: 50

Instructions to Candidates

Note: Answer any **FIVE** full questions.

1.A. Explain guidelines, benefits and types of caching in ASP.NET.
1.B. Explain with syntax, five validation controls in ASP.NET.
1.C. Create a web application which reads xml file (App_Data\Students.xml) shown in Fig.Q.1.C.1 and dynamically populates table in the code behind file based on the values read from the xml as shown in *Fig.Q.1.C.2*.**(Note: Use XmlTextReader Class to read the xml)** (4+3+3)

```
<?xml version="1.0" ?>
<StudentList>
  <Student ID="1">
    <Name>Amar</Name>
  </Student>
  <Student ID="2">
    <Name>Akbar</Name>
  </Student>
  <Student ID="3">
    <Name>Anthony</Name>
  </Student>
</StudentList>
```

Fig.Q.1.C.1

1	Amar
2	Akbar
3	Anthony

Fig.Q.1.C.2

2.A. Explain postback processing sequence that occurs at ASP.NET server.
2.B. Create a class in C# called "Employee" with an event "SalaryChanged" that occurs whenever salary is modified through the "salary" property. Create another class called "Department" with an event handler hooked up to the "SalaryChanged" event of "Employee" class.
2.C. Explain the following using example code:
(i) Parameterized command
(ii) Single-value data binding (5+3+(1+1))

3.A. Explain with neat diagrams, different technologies of .NET framework.
3.B. Explain behavior of value types and reference types under the circumstances such as assignment, equality and passing parameters by value and by reference.

3.C. Create a "Login" page in ASP.NET using web controls as shown in Fig.Q.3.C.1. On click of "Login" button, the user should be navigated to "Home" page if "username" and "password" fields are not blank. If "Remember Me" checkbox is checked, the "username" and "password" should be populated using cookies next time user opens the "Login" page. (4+3+3)

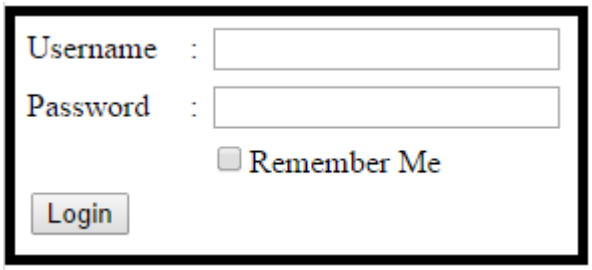

Fig.Q.3.C.1

4.A. Develop a simple web application to display the contents of "Product" table (schema shown in Fig.Q.4.A.1) using SqlDataSource and GridView controls as shown in Fig.Q.4.A.2. User should be allowed to edit only name and quantity (qty) of the Product. Using appropriate validation controls ensure that name field is not blank and quantity is between 1 and 100. User should be able to sort the gridview based on "Id" and "Name" columns.

	Name	Data Type
🔑	id	int
	name	varchar(50)
	price	float
	qty	float

Fig.Q.4.A.1

Id	Name		
1	Soap	**Price:** 20 **Qty:** 1	Update Cancel
2	Powder	**Price:** 40 **Qty:** 5	Edit

Fig.Q.4.A.2

4.B. Explain ASP.NET forms authentication with a neat diagram. Explain three steps to implement forms-based security.
4C. Explain with a suitable code, how theme conflicts can be handled. (5+3+2)

5.A. Create a C# Console Application with two classes called "Student" and "Department" with appropriate members to store values from the database tables "Student" (schema shown in Fig.Q.5.A.1) and "Department" (schema shown in Fig.Q.5.A.2) respectively. The Student object must contain a Department object. In the main method, use disconnected data access to fetch student information along with the information about the department (id and name) they belong to and populate this to a generic collection of Student.
(Note: "Dept_id" field of "Student" table references "Id" of "Department" table)

Column Name	Data Type
Id	int
Name	varchar(50)
Dept_id	int

Fig.Q.5.A.1: Student schema

Column Name	Data Type
Id	int
Name	varchar(50)

Fig.Q.5.A.2: Department Schema

5.B. With a neat diagram, explain the steps followed to query information with direct data access.
5C. Explain any four basic application events. (5+3+2)

6.A. Compare session and querystring using any five parameters.
6.B. Create a Web Form with Calendar control where the days are displayed with full names in blue, the weekends are displayed in orange background, the current date is displayed with a green background, and Next Month/Previous Month name should be displayed.
User is allowed to select any two dates via calendar. The selected dates should be displayed in non-editable text fields as shown in Fig.Q.6.B.1. When both non-editable text fields are populated, clicking on "Find" button displays the difference between dates in terms of number of hours.

Aug			September 2014			Oct
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11

10/1/2014 12:00:00 AM 9/29/2014 12:00:00 AM

Find **Number of hours is 48**

Fig.Q.6.B.1

6.C. Give any two differences between Server.Transfer and Response.Redirect. (5+3+2)