Reg. No.

MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL (A constituent unit of MAHE, Manipal)

VII SEMESTER B.TECH. (COMPUTER SCIENCE AND ENGINEERING) END SEMESTER EXAMINATIONS, NOV 2018 SUBJECT: INTERNET TECHNOLOGIES [CSE 4101] REVISED CREDIT SYSTEM (20/11/2018)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ✤ Answer ALL the questions.
- ✤ Missing data may be suitably assumed.
- **1A.** Create a Webpage with one dropdownlist, one image control, two textboxes, a button and a label. Dropdownlist contains roll numbers (Add any three entries). When the user selects the roll number, his image should be displayed in the image control (assume url for the image) and set focus to textbox for entering name (e.g. Rahul). The second textbox is for borrow date. On clicking the "Calculate Dues" button, if current date has exceeded 15 days from the borrow date then display "No dues Rahul" with green color else "You have Dues Rahul" with red color in the label Control. Also write the output to the xml file as shown in Fig.Q.1.A on click of the "Calculate Dues" button. Write both .aspx and .cs file.

Fig.Q.1.A

1B. Create a 'Person' class, which contains the properties called name, place, and age. Fire the event when the age is more than 90 or less than 1 as shown in Fig.Q.1.B. Write the console application to demonstrate the class. (Write the cs code)

Enter Name Varun Enter Place Udupi Enter Age 98 Age is out of range. It can't be more than 90 Fig.Q.1.B.

- **1C.** Explain any two reasons for using server-side programming in ASP.NET?
- **2A.** Explain the following with example code snippet.
 - i) Partial class
 - ii) Generics
 - iii) Optional and named parameters
- **2B.** Compare Session State and Application State with any four suitable parameters
- **2C.** Consider a database called "college" with table called "student" with following fields studentID, name, email, and mobile number. Create a website which has two

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textboxes and a button. Both texboxes are for entering studentID. On click of the button, retreive from database, the mobile number of studentID entered in the first textbox and update it to studentID entered in the second textbox. Use only direct data access and parameterized commands. (Write only the .cs code for this website.) **3M**

- **3A.** Consider a database called "Academia" with two database tables, "Student" and "GradeSheet". "Student" table has studentID (primary key), name, email, and mobile number as fields. "GradeSheet" contains studentID (foreign key), Subject, MarksObtained. Create a website which displays studentID, name, email and mobile number in the GridView. Once the user selects a student record, his grade sheet needs to be displayed in another GridView. Selected row should be made bold with background color yellow and foreground color blue. Connection string should be in web.config file. Write aspx code and web.config file. (USE ONLY SQLDataSource Control to access database)
- 3B. Explain how themes are created and with code snippet explain how themes can be dynamically set in the code behind.
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 3C. What are the problems with flat files and how XML solves it?
- **4A.** Create a master page with one dropdown. Values in the dropdown are "Only Text", "Only Numbers" and "Valid Date" Create a content page which has a textbox and a button. On click of a button, validate the textbox using custom validator. The textbox should be validated based on what is selected in the dropdown. Write aspx, master and cs file.
- **4B.** Create a website which displays all the drives of FileSystem in a DropDownList. When the user selects the Drive, the docx files in the drive should be displayed in the ListBox. When the user clicks delete button, any item selected in the ListBox should be deleted. The website should use cookies to ensure that the drive selected during previous visit is selected by default in the DropDownList. (Write only the .cs file.)
- **5A.** Explain the four types of caching.
- **5B.** Create a website as shown in Fig.Q.5.B. with one label, one dropdownlist and one button named "AJAX" inside the AJAX panel. The dropdownlist should contain two colours "red" and "blue". On clicking the dropdownlist, the "AJAX" button should change its colour based on the selected item. Similarly, the website should also include another label, dropdownlist and a button named "Full Postback" outside the AJAX panel which should perform the same function but only on full postback. (Write the aspx and .cs code for this website.)

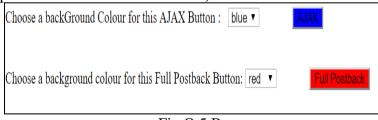


Fig.Q.5.B.

5C. With a neat flowchart, explain forms authentication to secure an ASP.NET website. **3M**

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