

2022

(July)

MCA

Paper Code: MCA-0818.5

Web Technology Lab

Full Marks: 40

Time: 3 Hours

The figures in the margin indicate full marks for the questions

Answer any **two (2)** questions

1. (a) Create an XML Document for a Book Shop in regards to the Books available. The root element describing the Book Store's collection is defined as **BookStore**. The **BookStore** element contains several elements called **Book**, which denotes several Books available in the store. The **Book** has the following child elements: *BookName*, *Author*, *Genre*, *Publisher* and *Price*. The Author Element has the following child elements: *FirstName*, *MiddleName*, *LastName*. The BookName Element has a "**release_date**" attribute. Make up sample data for at least 3 Books. (15)
(b) Write an internal DTD to validate the XML file designed in Question 1. (a). (5)
2. Create a Database in your local server '127.0.0.1'. Write a PHP script to establish the connection with the Database you created and insert data into the Database by using appropriate MySQL queries through XHTML form which consists of text boxes, radio buttons and a signup button as shown below: (20)

Registration form

Name:

Email:

Gender: Male ☐ Female ☐

3. Write an **external** Java Script that can reverse all the words and every character of each word of a given sentence. In an XHTML page, enable the user to input the sentence from a text box control.

Include appropriate validation sequence to check the following:

- a) Only Numeric inputs (Eg. 1234)
- b) Sentence with numbers (Eg. 12hello34)
- c) Empty text box/ Blanks, are not allowed.

Sample Input/Output:

Input: *Department of Computer Applications*

Output: *snoitacilppA retupmoC of tnemtrapeD* (20)

4. Write a JavaScript code to check student result of three subjects. Enable the user to input the student name, subject marks and a button to calculate the total, average, result and grade in an XHTML page.

The result analysis is based on following criteria:

- a) If mark of any one subject < 35, result is 'Fail' and grade is 'D'.
- b) If average ≥ 75 , result is 'Distinction' and grade is 'A+'.
- c) If average ≥ 60 and < 75, result is 'First class' and grade is 'A'.
- d) If average ≥ 50 and < 60, result is 'Distinction' and grade is 'B'.
- e) If average ≥ 35 and < 50, result is 'Distinction' and grade is 'C'.
- f) If average < 35, result is 'Fail'.

(20)
