**SCRIPTING LANGUAGES LAB**

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| **PART A Questions** | |
| **Course Code: ISL58** | **Credits: 0:0:2:0** |
| **Course Coordinator: Dr.Mydhili K Nair** | **Sem 5** |

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| **PART A Javascript Questions** | | |
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| **1** | Create a HTML form to accept a number. Include button to check whether the input is divisible by 3 or 7. Display the result. Ensure the data entered in the text box is a number only. Use Javascript for this client side scripting. Display appropriate error texts. Also show the execution when the javascript code in a different file. | |
| **2** | **Create** the details (name and story title) of four authors as a JSON object. Display a web page displaying the details of   * First two authors in a tabular form using HTML Table Tag * Other two authors as plain text | |
| **3** | **Create** a HTML form which contains one text area. Enter a sentence. Find the length of the longest word of that sentence using javascript. Also show the execution of this code with the javascript code as a “.js” file outside the HTML. | |
| **4** | **Create** a HTML form to accept a number. Include two buttons which when clicked  a) Button#1 displays value got when the number multiplied by 2  b) Button#2 displays value got when the number is multiplied by itself  Display the result. Ensure the data entered in the text box is a number only. Use Javascript for this client side scripting. Display appropriate error texts. Also show the execution when the javascript code in a different file. | |
| **5** | **Create** the details (name, native country, story title and publication year) of four authors as a JSON object. Display a web page displaying the details of   * First two authors in a tabular form using HTML Table Tag * Other two authors as plain text | |
| **6** | **Create** a HTML form to simulate a simple calculator. The arithmetic operations are to be displayed as radio buttons. Enter two numbers in two text boxes. Show the result. Handle the error case of ‘divide by zero’. Also show the execution of this code with the javascript code as a “.js” file outside the HTML. | |
| **PART A Python Questions** | | |
| **7** | **(i)** Create a dictionary that contains the atomic element symbol and its name.  **(ii)** Add a unique & duplicate element into this dictionary by interacting with the user. Observe the output and justify it.  **(iii)** Display the number of atomic elements in this dictionary  **(iv)** Ask user to enter an element to search in the dictionary. Display appropriate results.  Rewrite this program so that these operations are inside a function called ‘AtomicDictionary’. Create another python file called “Atomic.py” and execute this function in it. | |
| **8** | Create a list of 6 numbers. Use ‘list-comprehension’ to create a new list where each element in the original list is multiplied by 3. Use ‘lambda’ and ‘reduce’ function find the sum of the elements of the original liat as well as the new list. | |
| **9** | **(i)** Create a Python class called ‘Student’ having ‘name’, ‘age’ as attribute along with a list having the marks obtained for three subjects.  **(ii)** Create a constructor to initialize two objects of this class.  **(iii)** Create a member function called ‘display’ printing the details of a specific object  **(iv)** Ask user to enter the values for an object through an ‘accept’ member function.  **(v)** Display these details. | |
| **10** | Create a dictionary to hold student details with register numbers as the key. Print those student details whose register numbers are even. | |
| **11** | Write python program to do the following:  **(i)** Create a list of strings.  **(ii)** Print every string at the even position.  **(iii)** Convert every 3 rd string of the list to uppercase, reverse the contents of all the strings in the list and extracts numbers from all the strings in the list. | |