

National University of Computer and Emerging Sciences, Lahore Campus



Course:	Web Programming	Course Code:	CS-406
Program:	BS(Computer Science)	Semester:	Fall 2017
Duration:	60 Minutes	Total Marks:	40
Paper Date:	20-Sep-17	Weight	15%
Section:	ALL	Page(s):	3
Exam:	Mid 1	Roll No:	

Instruction/Notes: **Note: Please use the answer sheet to answer the questions.**

Question1- What is MVC design pattern? briefly describe all three parts of the MVC pattern and why they are used.

Marks 10

Question 2- Describe a servlet's life cycle. List out all the methods involved in the life cycle and the purpose of each method.

Marks 10

Question 4- What is the purpose of having a Listener in a web application. Give two examples of Listeners.

Marks 5

Question 6- As per the figure and HTML code given below write java script validation function to validate all the requirements given in red.

Marks 15

Registration Form

User id: Required and must be of length 5 to 12.

Password: Required and must be of length 7 to 12.

Name: Required and alphabates only.

Address: Optional.

Country: Required. Must select a country.

ZIP Code: Required. Must be numeric only.

Email: Required. Must be a valid email.

Sex: ☐ Male ☐ Female Required.

Language: ☒ English ☐ Non English Required.

About:

Optional.

```
1. <html lang="en"><head>
2. <meta charset="utf-8">
3. <title>JavaScript Form Validation using a sample registration form</title>
4. <meta name="keywords" content="example, JavaScript Form Validation, Sample registr
   ation form" />
5. <meta name="description" content="This document is an example of JavaScript Form V
   alidation using a sample registration form. " />
6. <link rel='stylesheet' href='js-form-validation.css' type='text/css' />
7. <script src="sample-registration-form-validation.js"></script>
8. </head>
9. <body onload="document.registration.userid.focus();">
10. <h1>Registration Form</h1>
11. <p>Use tab keys to move from one input field to the next.</p>
12. <form name='registration' onSubmit="return formValidation();">
13. <ul>
14. <li><label for="userid">User id:</label></li>
15. <li><input type="text" name="userid" size="12" /></li>
16. <li><label for="passid">Password:</label></li>
```

```

17.<li><input type="password" name="passid" size="12" /></li>
18.<li><label for="username">Name:</label></li>
19.<li><input type="text" name="username" size="50" /></li>
20.<li><label for="address">Address:</label></li>
21.<li><input type="text" name="address" size="50" /></li>
22.<li><label for="country">Country:</label></li>
23.<li><select name="country">
24.<option selected="" value="Default">(Please select a country)</option>
25.<option value="AF">Australia</option>
26.<option value="AL">Canada</option>
27.<option value="PK">Pakistan</option>
28.<option value="AS">Russia</option>
29.<option value="AD">USA</option>
30.</select></li>
31.<li><label for="zip">ZIP Code:</label></li>
32.<li><input type="text" name="zip" /></li>
33.<li><label for="email">Email:</label></li>
34.<li><input type="text" name="email" size="50" /></li>
35.<li><label id="gender">Sex:</label></li>
36.<li><input type="radio" name="msex" value="Male" /><span>Male</span></li>
37.<li><input type="radio" name="fsex" value="Female" /><span>Female</span></li>
38.<li><label>Language:</label></li>
39.<li><input type="checkbox" name="en" value="en" checked /><span>English</span></li>
40.<li><input type="checkbox" name="nonen" value="noen" /><span>Non English</span></li>
41.<li><label for="desc">About:</label></li>
42.<li><textarea name="desc" id="desc"></textarea></li>
43.<li><input type="submit" name="submit" value="Submit" /></li>
44.</ul>
45.</form>
46.</body>
47.</html>

```