- 3. Write programs in Java to create three-tier applications using JSP and Databases
 - 1. for conducting on-line examination.
 - 2. for displaying student mark list. Assume that student information is available in database which has been stored in a database server.

I. Procedure for creating design of client and server program

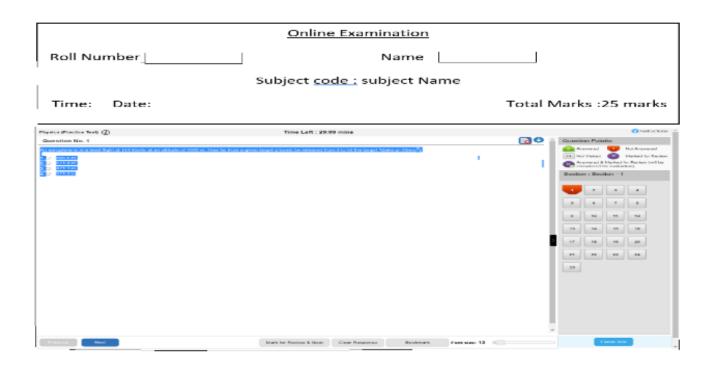
- 1. Design the HTML page (Exam Client.html) with the following
 - i) Create a form to get the input from the user.
 - ii) Use radio buttons to make various options for the questions.
 - iii) Set the URL of the server (Exam_Server.jsp) as the value of the action attribute.
 - iv) Use submit button to invoke the server and send the form data to the server.
- 2. Create the JSP file with the following
 - i) Read the input from the client.
 - ii) Retrieve the answers from the database.
 - iii) Match the answers from the user with the correct answers from the database table.
 - iv) For each correct answer increment the mark by 1.
 - v) Server displays the mark and result to the client as a response.

II. Form Design

Step 1: Create a database in MS-Access or MySQL. For instance, you have to create a student database (min 15 students) in MS-Access or MySQL. Inside this database create a table with following fields.

S.No	Roll Number	Name of Student	Marks

Step 2: Write a JSP document as following form format with style CSS format to conduct online exam and Validation (The form validation is also done in above JSP script)



Step3: After inputting the data appropriately, Click the finish button. And a Mark sheet will be displayed with style CSS format as follows and also update the table in database.

Roll number	
Name of Student	
Marks	