## SSN COLLEGE OF ENGINEERING, KALAVAKKAM DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

#### Internet Programming Lab – CS6512

# Programming Assignment 14 – Online Exam Web Application using MVC Architecture with Servlet Programming

Write programs in Java to create three-tier applications using servlets for conducting on-line examination for displaying student score using MVC architecture. Create the Student and Questions tables in the mysql server as follows to store the information about the students and Questions with choices:

Student table

Id StudentName Email Score

Questions table

Question Choice\_A Choice\_B Choice\_C Choice\_D Answer

Create three controllers, namely, *Registration Controller*, *Exam Controller* and *Result Controller*. The *Registration Controller* is responsible for communicating with *StudentDao* for registering the information about the student in the Student table. It displays the rules.jsp to display the rules for the online exam. When the start button is clicked, Exam Controller is invoked.

The *Exam Controller* is responsible for communicating with the QuestionsDao to display the questions from Questions table in Exam.jsp. When submit button in Exam.jsp is clicked, Result Controller is invoked.

The *Result Controller* is responsible for communicating with QuestionsDao and StudentDao to check answers and update the score in Student table. It also displays the result in result.jsp along with the students' information as follows:

#### **Online Examination Score**

Student Id: 101 Student Name: Alice Score: 78 out of 100

To summarize, create the following components of MVC architecture to realize the Online Exam Web Application.

#### **Controllers:**

Registration Controller Exam Controller Result controller

### Views:

Index.jsp

Rules.jsp

Exam.jsp

Result.jsp

#### Beans:

Student

Questions

### Daos:

StudentDao

QuestionDao