

**COMSATS** **University Islamabad, Lahore Campus**



**Mid Term – Repeat – Fall 2021**

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| Course Title: | Web Technologies | | | | Course Code: | | CSC336 | Credit Hours: | 3(2,1) |
| Course Instructor/s: | Muhammad Ali Khan | | | | Program Name: | | BCS | | |
| Semester: | 6th | Batch: | SP19 | Section: | C | | Date: | 11/12/2021 | |
| **Time Allowed:** | **90 minutes** | | | | **Maximum Marks:** | | | **40** | |
| Student’s Name: |  | | | | Reg. No. | CIIT/SDP- /LHR | | | |
| **Important Instructions / Guidelines:**   1. Attempt all the questions. | | | | | | | | | |

Course Learning Outcome and Program Learning Outcome of all questions are in the category**:**

**[CLO-C1, C3] [PLO-a1, i1]**

**Question 1: [Mars: 03]**

What is a Link component? Why would you prefer to use Link component in your React application?

**Question 2: [Mars: 04]**

List and explain briefly the objects inserted by the Route component in React application. Provide example for any one of them to justify your answer.

**Question 3: [Mars: 06]**

How Routing is implemented in React application? Provide example to justify your answer. (Note: you do not need to write any code for index.js or app.js)

**Question 4: [Mars: 04]**

What is the procedure to install third-party libraries in React application? After the installation, where would it reside in the file structure of React project folder?

**Question 5: [Mars: 03]**

What is the difference between named import and default import? Provide example to justify your answer.

**Question 6: [Mars: 20]**

Implement the following scenario. Requirements are as follows:

1. Create an array called “midterm-repeat” that holds studentID, studentName, subjectName, studentPicture, and examDate data for THREE students
2. midterm-repeat array is in repeat.js file
3. Write a component called “Repeaters” that will populate the data in table from midterm-repeat array
4. Repeaters component is at URL -repeaters-
5. In case the URL is manipulated or is inaccessible, user is taken to the -invalid- URL where Invalid component is rendered to show text – “Invalid URL”-

**Note:** You program must run. Therefore, you must write all the required code to show fully running single-page React application. Assume index.js code already exist.