

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
Department of Computer Science and Engineering (CSE)

Quiz 02**SUMMER SEMESTER, 2020-2021****DURATION: 30 MINUTES****FULL MARKS: 15**

CSE 4635: Web Architecture

Conform to the rules of the examination. Violation of any of the rules may result in termination.

Answer **all the questions**.

Write Student ID and Page Number on all pages. The first page should contain Student ID and Name.

Figures in the right margin indicate marks and CO-PO mapping.

1. Answer the following questions related to JavaScript:
 - i. In what ways can you create functions in JavaScript? Write down their syntax.
 - ii. What are the differences between JSON objects and JavaScript objects?
 - iii. What do you understand about the dynamic typing nature in JavaScript? Explain with example.
 - iv. Assume you have a **button** element in your HTML page. The text inside this element is "Log In" and the **class** of this element is "btn-class". How can you use DOM manipulation to change the text of this button to "Sign In"? Write down the necessary code.
 - v. What are the differences between function declaration and function expression? Which one should you use when handling events in your webpage? Write down the syntax you would use to handle a click event on the "Sign In" button mentioned in the previous question.

2. Assume you are working on a web application that has three pages: `homepage.jsp`, `profile.jsp`, and `items.jsp`. Apart from these three pages, you also have a `header.jsp`. Whenever a user logs in to the application, his/her username is stored as a request parameter called `username`. Now, answer the following questions:
 - i. When a user accesses any of the three pages mentioned above, the first line of the page prints the following message:
 - For the homepage, it prints: "Welcome to IUT Mart!"
 - For the profile page, it prints: "This is your profile," then shows the username of the user. E.g., "This is your profile page, Anas".However, the message is printed from the `header.jsp` page. Write down the necessary code inside your `homepage.jsp`, `profile.jsp`, and `header.jsp` to ensure that these two separate messages are printed for the two pages from the same `header.jsp` page.
 - ii. Assume you have a `javabean` called `ItemsBean` in your application, and it has three variables: `id`, `name` and `price` with all the necessary getter and setter methods. Also assume that you obtained a list of 10 items from your database with the `id` value ranging from 1 to 10. Now, write down the code inside your `items.jsp` page to dynamically load the information (`id`, `name` and `price`) about the 10 items. [You cannot hard-code the information about the items.]