**FACULTY OF INFORMATION TECHNOLOGY BACHELOR OF BUSINESS INFORMATION TECHNOLOGY**

**Assessment (BBT 2102)**

1. **Using a diagram, illustrate the web development architecture. (5 marks)**

Web development architecture is the representation how web systems work by giving an analysis of the different components that communicate, and their functions in web development

Web server

Browser

databse

**2. Distinguish between the following;**

**a) Backend and frontend. (2 marks)**

Backend Development: Backend is server side of the website. It stores and arranges data, and also makes sure everything on the client-side of the website works fine. It is the part of the website that you cannot see and interact with. It is the portion of software that does not come in direct contact with the users for that is ,it is the code that makes all the functionalities in a webpage say when a developer uses a API to send emails to anyone who registers into a system while Front End is the part of a website that user interacts with directly is termed as front end. It is also referred to as the ‘client side’ of the application. It includes everything that users experience directly for example a log in page that the coder was building for people to register into a system.

**b) HTML and DOM (2 marks)**

HTML is the standard markup language for Web pages, it allows the user to create and structure sections, paragraphs, headings, links, and block quotes for web pages and applications. while The Document Object Model (DOM) is a programming interface for HTML and XML documents. It represents the page so that programs can change the document structure, style, and content. The difference is that DOM is object oriented while html is semi structured and uses tags

**3. What is a server? (1 mark)**

A server is a computer or system that uses HTTP and other protocals to provide resources, data, services, or programs to other computers over a network that may be local area network or wide arear network that have been requested by clients made over the world wide web. Example when we create a login form in html and css we go to our browser and use localhost/ thread to get our login file since it is being hosted by a server that is Xamp.

**4. You intend to buy a shoe from “muuzaji.co.ke”, should you care about the protocol used i.e. http vs https? (1 mark)**

Yes it is because ,http means Hypertext transfer protocal and it is the set of rules used to communicate between a web browser and a web server to allow users to view web pages but the problem is the data is not encrypted and can be intercepted by third parties while https is the extension of http only that ,that “S” in the abbreviation comes from the word Secure and it is powered by Transport Layer Security (TLS) and is very important for sites that have sensitive information .When you are purchasing goods online and for example the payment method is credit card you have to write your credit card number and put your password this is private information hence the site has to be secure to avoid cases such as theft.

**5. I have recently paid for a domain (10 minutes ago), however I try typing my domain name and get a “This site can’t be reached” message. Have I been conned? (2 marks)**

A domain name is the website address people type into their browser to visit your site, maybe the domain is not supported by the browser version.

**6. Assume a web page is written in PHP, how come I cannot download the PHP**

**source code from my web browser? (2 marks)**

PHP is a server-side scripting language. That basically means that the server reads it, not your browser. All of the PHP scripts on a page are executed on the server before they are delivered to the browser.

**7. Write a short PHP script that displays “hello bujumbura”. (1 mark)**

<?php

echo "<h1>hello bunjumbura”;</h>";

?>

**8. Style your message using CSS to heading one. (1 mark)**

<?php

echo "<h1 style="color:blue;">hello bunjumbura”;</h>";

?>

**9. Add a script such that if you click “hello bujumbura” it displays an alert saying, “Burundi massive!” (1 mark)**

<?php

echo "<h1 style="color:blue;">hello bunjumbura”;</h>";

<script>

function myFunction() {

alert("Burumdi massive!");

}

</script>

?>

**10. Write a script that connects to a database and adds a record. (5 marks)**

<?php  
 $servername = "localhost";  
 $username = "username";  
 $password = "password";  
  
 $conn = mysqli\_connect($servername, $username, $password);  
  
 if (!$conn) {  
     die("Connection failed: " . mysqli\_connect\_error());  
 }  
 echo "Connected successfully";

$sql = "CREATE TABLE bunjumbura (  
 fullname VARCHAR(30) NOT NULL,  
 greetings VARCHAR(30) NOT NULL

)";

$sql = "INSERT INTO bunjumbura (fullname,greetings)  
VALUES ('Fredah Kioko', 'hellow world')";  
  
if (mysqli\_query($conn, $sql)) {  
    echo "New record created successfully";  
} else {  
    echo "Error: " . $sql . "<br>" . mysqli\_error($conn);  
}  
  
mysqli\_close($conn);  
?>

?>

**Total : 23 Marks**