

**Bachelor of Information & Communication Technology Honours Degree**

**Faculty of Technological Studies**

**Uva Wellassa University of Sri Lanka**

**ICT 142-3 Internet and Web Technologies**

**Written Assignment**

**Date: 23<sup>rd</sup> June 2022**

**No. of Questions: 4**

**No. of Pages: 3**

**Time: For writing answers, 1.5 hours. Additional 10 minutes for scanning the document and email.**

**Answer ALL FOUR (04) questions.**

**All questions carry equal marks.**

**Clearly state your assumptions.**

**ANSWERS SHOULD BE HANDWRITTEN.**

---

**Q1:**

- a) Write three different advantages and three disadvantages of having a web application over a desktop application.
- b) Briefly describe the components of a Unified Resource Locator (URL).
- c) Describe the contents/parts of an HTTP request and response.
- d) Describe the role of the Domain Name System (DNS) server in a web application.
- e) Explain the difference between the POST and GET methods giving suitable examples.

(Marks: 25)

**Q2:**

- a) What is the difference between “Internet” and “Intranet”?
- b) Briefly describe the request-response loop in the client-server model.
- c) Describe the difference between static websites and dynamic websites considering the application server and database server.
- d) Briefly explain the concept of “Web 2.0”.



- e) Explain three kinds of possible errors which are found in web applications.

(Marks: 25)

**Q3:**

- a) What are the advantages of HTML over a plain-text representation of data?
- b) What purpose do the HTML tags <div> and <span> serve?
- c) Describe the three methods of adding Cascading Style Sheets (CSS) to HTML tags with appropriate examples.
- d) The managing director of “Nice Web Sites” wants to update the website and change the appearance of the text throughout all the web pages. He has instructed his technical staff to make the following changes using Cascading Style Sheets (CSS).

Text	Font	Size	Colour	Style
Headings	Verdana	24	Red	Bold
Sub Headings	Tahoma	20	Blue	Italic
Body Text	Arial	16	Black	Regular

Create the CSS rules that implement the above changes.

(Marks: 25)

**Q4:**

The following Employer table belongs to the Employer Management Web System in the “WebZone” company. The hostname, database name, username, and passwords of the database are “localhost”, “myDB”, “admin\_user”, and “admin\_123” respectively.

Employer Table

Name	Department	Salary
B.B.C. Perera	IT	108,000
P.Q.R. Silva	HR	56,000

- What are the common APIs used for PHP and MySQL? Give three examples of such APIs.
- Write a PHP code for connecting to the above database using **mysqli**. The connection errors should be handled from your code.
- Write a PHP code to show all employers' detail who are working in the IT department using **mysqli**.
- Write a PHP code to insert the following record to the Employer table using **mysqli**.

G. Herath	IT	78,000
-----------	----	--------

(Marks: 25)

\*\*\* END OF PAPER \*\*\*