



Sri Lanka Institute of Information Technology

B.Sc. Honours Degree in Information Technology

Specialized in Information Technology

Final Examination  
Year 1, Semester 2 (2022)

IT1100 – Internet and Web Technology

Duration: 2 Hours

November 2022

Instructions to Candidates:

- ◆ This paper is preceded by a 10-minute reading period. The supervisor will indicate when answering may commence.
- ◆ This paper has 3 questions.
- ◆ Answer all questions in the booklet given.
- ◆ The total mark for the paper is 100.
- ◆ This paper contains 6 pages, including the cover page.
- ◆ Electronic devices capable of storing and retrieving text, including calculators and mobile phones are not allowed.

**Question 1****(30 Marks)**

- a) Compare LAN and WAN networks.  
(4 marks)
- b) You are asked to create a web site/web application to maintain and display fuel information of a vehicles (Vehicle Number, QR code, used fuel etc.). Select your choices from below requirements and justify your selections.  
(8 marks)
- I. Static or Dynamic content
  - II. Development languages
  - III. Database
  - IV. Network (LAN, WAN)
- c) What are the two types of components of a computer system according to the distribution? Name and briefly explain them.  
(4 marks)
- d) Briefly describe the following three terms with respect to Information Security.  
**Availability, Confidentiality, Integrity**  
(6 marks)
- e) Name 2 real examples for each of the following e-commerce categories
- I. B2B
  - II. B2C
- (4 marks)
- f) Describe 4 best security practices for YouTube.  
(4 marks)

**Question 2****(30 Marks)**

You are asked to draw a multiplication table (*Figure 01*) using HTML, CSS, and JavaScript. Complete the following steps (a – e).

a) Write a HTML code to create an interface to get two (02) user inputs, with a button as explained below.

(04 marks)

Label----> **How many rows for your multiplication table?** Text Box

Label----> **How many columns for your multiplication table?** Text Box

Button -----> Draw Multiplication Table

b) Write a JavaScript function (“**createTable()**”) to accept user inputs (columns and rows) through the two text boxes.

(03 marks)

c) Complete the JavaScript function (“**createTable()**”) to generate the multiplication table

(17 marks)

1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

*figure 01: Multiplication Table*

d). Write a CSS code to change the background color of the multiplication table into “#bde9ba;”.

(03 marks)

Note: Complete the CSS code in the given space within <style> tags

e) Call the JavaScript function (“**createTable()**”) on the button (“Draw Multiplication Table”) click event.

(03 marks)

**Hint:**

An expert programmer tried this question and suggested the following steps for the JavaScript function.

- Declare the start of the JavaScript
- Declare the function "createTable"
- Initialize variables needed store number of rows and number of columns
- Get the first text box value and convert it into an integer
- Get the second text box value and convert it into an integer
- Start HTML table
- Perform multiplication and display the output
- End HTML table
- Declare the end of the JavaScript

**Question 3****(40 Marks)**

Below is an interface for Online Vehicle fuel pump ("vehicledetail.html").

<b>Vehicle Owner Details</b> Owner Name: <input style="width: 100%;" type="text"/> Mobile Number: <input style="width: 100%;" type="text"/> Email: <input style="width: 100%;" type="text"/> Address : <input style="width: 100%; height: 40px;" type="text"/>
<b>Vehicle Details</b> Fuel type: <input style="width: 100%;" type="text" value="Petrol"/> Vehicle Number: <input style="width: 100%;" type="text"/> Air Condition <input checked="" type="radio"/> With AC <input type="radio"/> Without AC
<b>Fule Details</b> Pumped Date : <input style="width: 100%;" type="text" value="mm / dd / yyyy"/> Number of Litres <input style="width: 100%;" type="text" value="5"/> <input style="width: 100%;" type="button" value="Submit"/>

- a) Construct HTML code (“**vehicledetail.html**”) to display the above form. Your form method should be post and the action page name should be “**insert\_fueldetail.php**”.
- (10 marks)
- b) You have a database “**vehicle\_db**”, inside that there is a table name “**vehicle\_details**”. The user name for the database is “**root**” and the password is **con@34#!**. Write a “**config.php**”, to create a MySQL database connection object.
- (5 marks)
- c) Create a PHP file “**insert\_Fueldetail.php**” and complete it by adding PHP codes for the following requirements.
- (15 marks)
- I. Import “**config.php**” file.
  - II. Capture all the user inputs you received from “**vehicledetail.html**”.
  - III. Insert data in to “**vehicle\_details**” table by using an insert query.

The structure of the table (“**vehicle\_details**”) is as below.

Case id	integer
Owner name	varchar
Owner_email	varchar
Owner address	varchar
Vehicle number	varchar
Vehicle_type	varchar
Air cond	varchar
Pumped date	date
Litrs	integer

- d) Create a PHP file “**display\_vehicledetail.php**” and display a record (according to the sample output format given below) available in the table “**vehicle\_details**”.  
(10 marks)

Sample output:

**Owner detail :**

Customer Name: Sumudu Gamage

Customer Email: sumudu.g@gmail.com

Customer Phone Number: 0777589652

Customer Address: No 11, Main Street, Colombo 05

**Vehicle details:**

Vehicle Number : KF8482

Fuel Type : Petrol

Air Condition :Yes

Pumped Date: 15/06/2022

Number of Ltr : 8l