



Sri Lanka Institute of Information Technology

B. Sc. Special Honours Degree/ Diploma

in
Information Technology

Final Examination
Year 1, Semester 2 (2023)

IT1100 - Internet and Web Technologies

Duration: 02 Hours

Instruction to Candidates:

- This paper is preceded by a 10-minute reading period. The supervisor will indicate when answering may commence.
- This paper has 04 questions. Answer all questions.
- Provide answers for the questions on the answer booklet given.
- Total marks 100.
- This paper contains 05 pages including the Cover page.

Question 1**(20 Marks)**

- a) Define the terms IP address and domain name. State two advantages of using domain names over the IP addresses?
(4 marks)

- b) Illustrate and explain “3-tire architecture” for web applications.
(4 marks)

- c) Name the different parts of a URL using the following example?

ftp://ftp.funet.fi:8080/pub/standards/RFC/rfc959.txt

(6 marks)

- d) Select the most suitable e-commerce type for the following.

(3 marks)

- I. Ben buying a pen drive from Tom on eBay
- II. Kingston selling memory cards to Dell via online
- III. Tom buying a laptop online from Dell

- e) Compare XML and HTML markup languages.

(3 marks)

Question 2**(20 Marks)**

- a) Briefly explain the Web Crawling, Indexing and Searching relevant to search engines.
(6 marks)

- b) "Protecting people's information is the most important responsibility we have at Facebook". Explain the above statement by giving four (04) security best practices taken by "Facebook".
(4 marks)

- c) Name three (3) types of internet security attacks and explain them briefly.
(6 marks)

- d) Write a php code to creates a cookie named "module" with the value "IWT" which will expire after 3 months.
(4 marks)

Question 3**(30 Marks)**

a) You need to create the below given HTML form and complete the following steps using CSS and JavaScript.

i. Create the following HTML form.

(6 marks)

Password Checker

Password:

Re-enter Password:

ii. Write a CSS code to change the background color of the button into yellow with the text color red using **inline** style method.

(4 marks)

iii. Create a JavaScript function called as **matchPassword()** to match the **password** field with the **Re-enter password** field and Call the function on the button ("Submit") click event.

(10 marks)

b) Write a JavaScript code segment to create the given array below with the relevant numbers.

numbers = [1, 12, 4, 7, 8, 3, 5, 11, 9, 10]

Then find out the **even** numbers from that array and include those in another array called **evenNumber**. The new array elements should be displayed using an alert box at the end.

(10 marks)

Question 4**(30 Marks)**

- a) Consider a scenario where you have been provided with a database named "SudentInfo_db," containing a table named "StudentDetails" in the localhost. The database requires authentication with a username of "root" and a password of "std@#786". Write the implementation for the " config.php " file that establishes a mysqli database connection object.
- (4 marks)
- b) Construct the HTML code ("registration.html") to display the below form. Your form method should be "post" and the action page name should be "StudentRegistration.php".
- (10 arks)

Student Registration Form

Personal Details	
Student Name:	<input type="text"/>
Gender:	<input type="radio"/> Male <input type="radio"/> Female
Mobile Number:	<input type="text"/>
E-mail:	<input type="text"/>
Address:	<input type="text"/>

User Account Details	
User Name:	<input type="text"/>
Password:	<input type="password"/>
<input type="checkbox"/> Accept privacy policy and terms.	
<input type="submit" value="Submit"/>	

- c) Import the above created configuration file (config.php).
- (1 mark)

- d) Capture all the user inputs submitted through the above created HTML Form ("registration.html") and send data in to "StudentDetails" table by using an insert query.

[Hint: Refer to the structure of the table ("StudentDetails") is as below.] (10 marks)

Column Name	Data Type
StudentName:	Varchar
Gender	Varchar
Mobile	Integer
Email	Varchar
Address	Varchar
UserName	Varchar
Password	Varchar

- e) Create a file called "DisplayStudentDetails.php" and display the records from the table "StudentDetails" according to following format. (5 marks)

Sample Output: Should display the database records

Name: Kamal Perera

Gender: Male

Mobile: 0771122334

Email: kamal@gmail.com

Address: Colombo

Name: Sunil Shantha

Gender: Male

Mobile: 0713322445

Email: sunil@gmail.com

Address: Kandy

End of the Question Paper