

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)

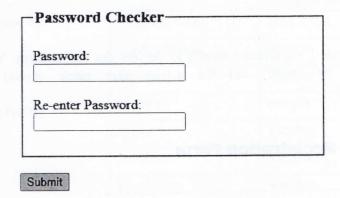
Question 3

(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)



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)

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

Student Name:		
Gender:		
O Male O Female		
Mobile Number:		
7.11		
E-mail:		
Address:		

User Name:

Password:

Accept privacy policy and terms.

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