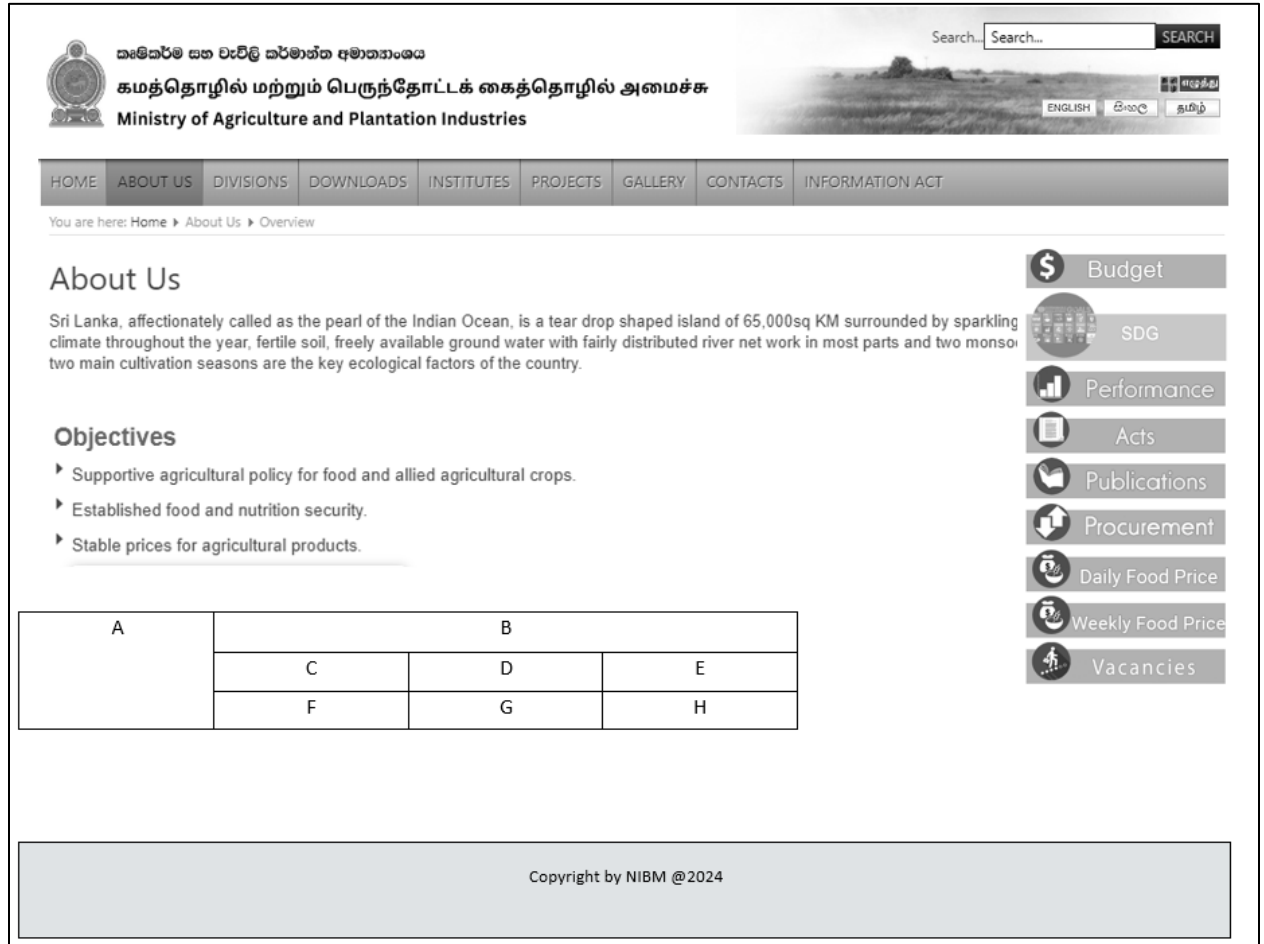


INSTRUCTIONS:

- This is a closed book exam.
- Time allocated is 3 hours including reading time.
- Read the description given under each main question and answer sub questions of each.
- This paper contains 05 questions. Answer all questions.

- 1) a) Write the HTML code for the following image. Add required CSS styles to the website using external CSS styles. You can use any dummy content and assign any preferred name to the images.
(20 marks)



The screenshot shows the official website of the Ministry of Agriculture and Plantation Industries of Sri Lanka. The header includes the ministry's name in Sinhala and Tamil, along with the English name. A search bar is present in the top right. The navigation menu includes links for Home, About Us, Divisions, Downloads, Institutes, Projects, Gallery, Contacts, and Information Act. The main content area is titled 'About Us' and describes Sri Lanka as a tear drop shaped island. It lists three objectives: supportive agricultural policy, food and nutrition security, and stable prices for agricultural products. A table with 8 cells (A-H) is displayed. On the right side, there is a sidebar with various links: Budget, SDG, Performance, Acts, Publications, Procurement, Daily Food Price, Weekly Food Price, and Vacancies. The footer contains the copyright notice 'Copyright by NIBM @2024'.

A	B		
	C	D	E
	F	G	H

b) Implement the HTML code for the following image, including all necessary HTML form tags & attributes to meet the requirements mentioned above. (10 marks)

COLLEGE APPLICATION FORM

Name

First Name

Last Name

Gender

Date of Birth

Phone Number

Please enter a valid phone number.

Email

example@example.com

Admission Application For

☐ 1st Semester

☐ 2nd Semester

Course Applied For

Please provide any academic achievements or awards you have received in College (if there is any)

Next

2)

- a) Consider the form given below. Write a JavaScript function to include the following validations for the data input through the form. (**You are required to write only the JavaScript function. Do not create the form**). (15 marks)

New year Games Participant Form

Name:

Email:

Phone Number:

NIC:

- All fields should not be empty.
- The 'email fields should validate the email address format (“@” sign and “.” Sign)
- The 'Phone Number accepted only numeric values.

Display suitable messages to the user based on the result of each validation.

- b) What are the methods in JavaScript for displaying text, and illustrate each with examples. (5 marks)

3)

- a) Consider the form given below. Design a PHP function that computes the total cost of items purchased while implementing discount policies based on the quantity bought. The criteria are as follows:

No discount applies for purchases fewer than 10 items.

A 10% discount is granted for purchases ranging from 10 to 49 items.

A 15% discount is applicable for purchases between 50 and 99 items.

A substantial 25% discount is offered for purchases totaling 100 or more items.

- (**You are required to write only the PHP code. Do not create the form**). (15 marks)

Product Purchase Form

Product Price:

Quantity Purchased:

- b) Create a SQL query that presents the total quantity of each item purchased, grouped by **item_name**. (5 marks)

Table name: purchased_items.

id	item_name	quantity	price
1	Rice	10	1750
2	Red Rice	5	850
3	Biscuit	2	900
4	Beans	1	180
5	Rice	4	700
6	Beans	6	1080
7	Beans	4	720

- 4)
- What are the key differences between on-page and off-page SEO optimization techniques? (5 marks)
 - What are the potential risks of using black hat SEO techniques? Provide examples of black hat SEO practices. (5 marks)
 - How can designers use visual colors to guide users' attention and improve the usability of a website? (5 marks)
 - What is the difference between wireframe & prototype? (5 marks)
- 5)
- List five essential factors to be considered for selecting a cloud service provider to host an e-commerce website portal for critical business operations (5 marks)
 - Explain the fundamental elements required for hosting a website. (5 marks)