



SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Information Technology

First Year, First Semester Examination – 2023

HNDIT 1022-Web Design

Instructions for Candidates:

Answer any (5) questions.

No. of questions: 06

No. of pages: 04

Time: Three (03) hours

Q1.

- 1) Define the term *Internet Protocol* (IP). [02 Marks]
- 2) List two main purposes of using the internet in daily life. [04 Marks]
- 3) Explain the concept of DNS and its role in web browsing. [06 Marks]
- 4) Fill in the blanks with suitable words from the list given below. [08 Marks]
(TCP/IP, Domain Name, HTTP, FTP, URL, Bandwidth, HTTPS, Router, ISP, Cloud Storage)
 - a. Https is the secure version of HTTP used for encrypted data transfer.
 - b. _____ is a hardware device that directs data across networks.
 - c. A unique name that identifies a website on the Internet is called a _____.
 - d. _____ is a protocol used for the reliable transmission of data packets across a network.

[Total 20 Marks]

Q2.

- 1) What does HTML stand for? ✓ [02 Marks]
- 2) Name four main structural elements in an HTML document. ✓ [04 Marks]
- 3) Write the HTML code to create the following *list* of favorite movies. [06 Marks]

Hint : You may find the following information helpful for your answer.

Movies – H1

Favorites – H2

Inception, Interstellar, The Matrix – default Size

• Movies h1

• Favorites h2

- A. Inception
- B. Intersteller
- C. The Matrix

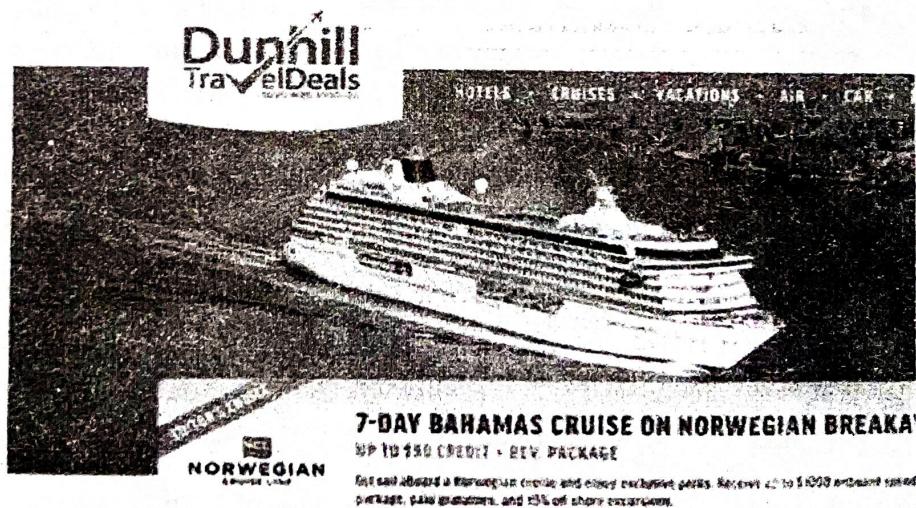
4) Fill in the blanks in the following spaces by applying your HTML knowledge. [08 Marks]

- a. The tag for adding a hyperlink is <a href>.
- b. An image can be embedded using the tag.
- c. The href attribute is used to specify the URL for an <a> tag.
- d. HTML documents typically start with <!DOCTYPE html>.

[Total 20 Marks]

Q3.

- 1) Define a wireframe in web design. [02 Marks]
- 2) Why are wireframes essential in the design process? [04 Marks]
- 3) List three common elements included in a wireframe. [06 Marks]
- 4) Sketch the wireframe design for the given web page. [08 Marks]



[Total 20 Marks]

Q4.

- | | |
|---|------------|
| 1) What is CSS used for in web development? | [02 Marks] |
| 2) List and describe <u>two</u> benefits of using External CSS in web design. | [04 Marks] |
| 3) Write CSS code to set all paragraph text to 14-point Arial font. | [06 Marks] |
| 4) Fill in the blanks in the CSS properties and values | [08 Marks] |
- a. To specify font style as italic, the font-family property is used.
b. _____ is used to set the background image for an element.
c. To align text to the center, the text-align property is used.
d. The property to specify border color is border-color

[Total 20 Marks]

Q5.

- | | |
|---|------------|
| 1) List <u>two</u> common uses of JavaScript in web development.? | [02 Marks] |
| 2) Name <u>two</u> rules for defining variables in JavaScript. | [04 Marks] |
| 3) What is the output of the following JavaScript code snippet? | [06 Marks] |

```
<script type="text/javascript"> // Define the grade variable
var course = 'HNDA';
document.write("Entering switch block<br />");
switch (course) {
case 'HNDIT': document.write("Higher National Diploma in Information Technology<br />");  

break;
case 'HNDA': document.write("Higher National Diploma in Accountancy<br />");  

case 'HNDTHM': document.write("Higher National Diploma in Tourism and Hospitality Management <br />");  

case 'HNDM': document.write("Higher National Diploma in Management<br />");  

break;
case 'HNDE': document.write("Higher National Diploma in English<br />");  

break;
default: document.write("Unknown course<br />");  

}
document.write("Exiting switch block");

</script>
```

- 4) a. Write the required HTML code to display the following form. [04 Marks]

Billing Form

Unit Price :	
Quantity :	
Discount Percentage :	
Display Bill :	Your Bill..
<input type="button" value="Calculate Bill"/>	

- b. Write a JavaScript function to calculate the bill and display it in the appropriate text box. [04 Marks]

Hint : When you click the Calculate Bill button, the bill will be displayed in the text box.

$$\text{Bill} = \text{Unit Price} * \text{Quantity} - (\text{Unit Price} * \text{Quantity} * \text{Discount Percentage} * 1 / 100)$$

[Total 20 Marks]

Q6.

- 1) Define web hosting. [02 Marks]
- 2) List two reasons why web hosting service providers offer uptime guarantees. [04 Marks]
- 3) What are the three types of web hosting plans? Briefly describe each. [06 Marks]
- 4) Fill in the blanks related to web hosting features:
 - a. _____ is a control panel for managing hosting services.
 - b. _____ provides security for the website.
 - c. _____ is the amount of data transferred between a website and its users.
 - d. _____ ensures that a website's data is saved regularly to prevent data loss.

[Total 20 Marks]