**EXAMINATION PAPER: DEVELOP A WEBSITE**

## ****EXAMINATION PAPER: DEVELOP A WEBSITE****

**Learning Outcome 1: Apply Keyboard Skills**  
**Total Learning Hours: 20**  
**Instructions:** Answer all questions in their respective sections.

### ****SECTION A: Definition and Types of Keyboard Characters****

**1. Define a keyboard character.** (2 marks)  
**2. List and explain three types of keyboard characters.** (6 marks)  
**3. Name and describe the main parts of a keyboard.** (6 marks)

**Solutions:**

1. A **keyboard character** is any symbol, letter, number, or special symbol that can be typed using a keyboard.
2. Types of keyboard characters:
   1. **Alphanumeric Characters** (Letters A-Z, a-z, Numbers 0-9)
   2. **Special Characters** (!, @, #, $, etc.)
   3. **Function Keys** (F1-F12 for system commands)
3. **Parts of a Keyboard:**
   1. **Alphanumeric Keypad** (Letters, numbers)
   2. **Function Keys** (F1-F12 for shortcuts)
   3. **Navigation Keys** (Arrow keys, Home, End, Page Up/Down)
   4. **Numeric Keypad** (Numbers, arithmetic operations)

### ****SECTION B: Combination Keys and Their Use****

**4. What are combination keys? Give two examples.** (4 marks)  
**5. Explain how the following key combinations work:** (6 marks)  
a) Ctrl + C  
b) Alt + Tab  
c) Shift + Delete

**Solutions:**  
4. **Combination keys** are key pairs pressed together to perform a function. Examples:

* **Ctrl + S** (Saves a file)
* **Alt + F4** (Closes the current window)
  + **Ctrl + C**: Copies selected text or item.
  + **Alt + Tab**: Switches between open applications.
  + **Shift + Delete**: Permanently deletes a file without moving it to the Recycle Bin.

### ****SECTION C: Application of Typing Technique****

**6. Why is proper hand positioning important while typing?** (4 marks)  
**7. Describe the correct body posture when using a keyboard.** (4 marks)  
**8. Define ergonomics and explain how it applies to typing.** (6 marks)

**Solutions:**  
6. Proper hand positioning:

* Reduces strain and fatigue.
* Improves speed and accuracy.
* Prevents repetitive stress injuries.

1. **Correct Body Posture:**
   * Sit upright, back straight.
   * Feet flat on the floor.
   * Wrists straight, elbows at 90 degrees.
   * Screen at eye level.
2. **Ergonomics**: The study of designing equipment for efficiency and comfort. In typing:
   * Use an adjustable chair.
   * Keep hands and wrists neutral.
   * Take breaks to prevent strain.

### ****SECTION D: Typing Speed****

**9. What is typing speed measured in?** (2 marks)  
**10. Explain how to improve typing speed.** (6 marks)  
**11. What is considered a good typing speed for professionals?** (2 marks)

**Solutions:**  
9. **Typing speed** is measured in **Words Per Minute (WPM).**  
10. To improve typing speed:

* Practice daily using typing software.
* Maintain proper posture.
* Avoid looking at the keyboard.
* Use muscle memory techniques.

1. A good professional typing speed is **50-80 WPM**.

### ****SECTION E: Use of Typing Master****

**12. What is Typing Master?** (2 marks)  
**13. How does Typing Master help in improving typing efficiency?** (4 marks)  
**14. What are some key features of Typing Master software?** (4 marks)

**Solutions:**  
12. **Typing Master** is a typing tutor software that helps improve typing speed and accuracy.  
13. **Typing Master** provides:

* Interactive lessons for hand positioning.
* Real-time speed tracking.
* Error correction features.

1. Features of Typing Master:

* **Speed tests**
* **Custom lessons**
* **Typing games**
* **Performance reports**

### ****SECTION F: Checking Total Number of Words Per Minute****

**15. How can a user check their typing speed?** (4 marks)  
**16. If a person types 300 words in 5 minutes, what is their WPM?** (4 marks)  
**17. Why is it important to track writing errors while typing?** (4 marks)

**Solutions:**  
15. To check typing speed:

* Use online typing test websites.
* Use Typing Master software.
* Use built-in typing speed checkers in some keyboards.

1. **Typing Speed Calculation:**

* WPM = Total Words Typed / Total Minutes
* WPM = **300 / 5 = 60 WPM**

1. Tracking errors is important to:

* Reduce mistakes in professional work.
* Improve typing accuracy.
* Identify frequent mistakes and correct them.

### ****SECTION G: Games to Improve Typing Speed****

**18. List three online games that help improve typing speed.** (3 marks)  
**19. How do typing games help in skill development?** (5 marks)  
**20. Name a game that helps improve reaction time and typing accuracy simultaneously.** (2 marks)

**Solutions:**  
18. **Typing Games:**

* **TypingClub**
* **TypeRacer**
* **Keybr.com**

1. **Typing games help in:**

* Improving finger coordination.
* Increasing accuracy and speed.
* Making practice engaging and fun.
* Enhancing memory and reaction time.

1. **TypeRacer** helps improve reaction time and accuracy as users compete to type fast.

This exam covers **definitions, practical applications, and calculations** to test a student's understanding of **keyboard skills**. Let me know if you need modifications! 😊

4o

##### You said:

you are missing to correct section G and try to explain solution

###### ChatGPT said:

You're right! Here's the corrected **Section G** with better explanations for each solution.

### ****SECTION G: Games to Improve Typing Speed****

**18. List three online games that help improve typing speed.** (3 marks)  
**19. Explain how typing games contribute to skill development.** (5 marks)  
**20. Name a typing game that improves both reaction time and typing accuracy.** (2 marks)

**Solutions:**

1. **Typing Games That Improve Speed:**

* **TypingClub** – A step-by-step typing tutorial that improves accuracy and speed.
* **TypeRacer** – A competitive typing game where users race against others by typing passages as quickly as possible.
* **Keybr.com** – A training platform that generates random words based on the user's weakest keys to improve finger placement.

1. **How Typing Games Help in Skill Development:**

* **Muscle Memory Enhancement** – Repeating common words helps train fingers to type without looking at the keyboard.
* **Speed Improvement** – Timed challenges encourage faster typing while maintaining accuracy.
* **Error Reduction** – Games highlight mistakes and reinforce proper typing habits.
* **Hand-Eye Coordination** – Players must quickly read text and type it accurately, improving focus and reaction speed.
* **Engagement & Motivation** – Interactive and competitive elements keep users engaged, making learning enjoyable.

1. **Game That Improves Reaction Time & Accuracy:**

* **TypeRacer** – This game pushes users to type quickly while competing against others, improving both reaction speed and accuracy under pressure.

### ****Complete Exam Paper Recap****

This exam now thoroughly covers all aspects of **keyboard skills**, including:  
✔ Definitions and types of keyboard characters (Section A)  
✔ Key combinations and shortcuts (Section B)  
✔ Proper typing techniques and ergonomics (Section C)  
✔ Measuring and improving typing speed (Sections D & E)  
✔ Tracking performance with Typing Master (Section F)  
✔ Using games to enhance typing skills (Section G)

This ensures students are tested on **both theory and practical aspects** of typing! Let me know if you'd like any refinements. 😊

4o

##### You said:

Learning outcome 2: Create web structures Learning hours: 70 Indicative content • Definition of general key terms ✓ Webpage ✓ Website ✓ Web browser ✓ Text editor ✓ URL ✓ Hyperlink • Setting up of text editor and web browser ✓ Examples of text editor ✓ Types and function of web browser ✓ Installing text editor and web browser From storage drive From internet • Creating a web page in HTML ✓ Description of website Types Function ✓ Introduction to HTML ✓ Description of HTML tag Definition Types and examples Tag attributes ✓ Developing first simple webpage Use HTML page structure Use HTML extension to save document Display contents using web browser

###### ChatGPT said:

Memory updated

Here’s an **exam paper** for **Learning Outcome 2: Create Web Structures**, covering the indicative content with **questions and solutions**.

## ****EXAMINATION PAPER: DEVELOP A WEBSITE****

**Learning Outcome 2: Create Web Structures**  
**Total Learning Hours: 70**  
**Instructions:** Answer all questions in their respective sections.

## ****SECTION A: Definition of General Key Terms****

**1. Define the following terms:** (10 marks)  
a) Webpage  
b) Website  
c) Web browser  
d) Text editor  
e) URL

**2. Explain the purpose of a hyperlink in a webpage.** (2 marks)

**Solutions:**  
1.

* **Webpage**: A single document on the internet, typically written in HTML and displayed in a web browser.
* **Website**: A collection of related webpages hosted under a single domain name.
* **Web browser**: Software that retrieves and displays web pages from the internet (e.g., Chrome, Firefox).
* **Text editor**: A program used to write and edit code for webpages (e.g., VS Code, Sublime Text).
* **URL (Uniform Resource Locator)**: The unique address used to access a webpage on the internet.

1. **A hyperlink** allows users to navigate between different webpages or sections of a webpage by clicking on a linked text, image, or button.

## ****SECTION B: Setting Up a Text Editor and Web Browser****

**3. List three examples of text editors used for web development.** (3 marks)  
**4. What are the two main types of web browsers? Explain their functions.** (6 marks)  
**5. Describe two methods for installing a text editor and a web browser.** (6 marks)

**Solutions:**  
3. Examples of text editors:

* **Visual Studio Code**
* **Sublime Text**
* **Notepad++**

**Types of Web Browsers:**

* + **Graphical Browsers** (e.g., Chrome, Firefox) – Display multimedia content, support JavaScript, CSS.
  + **Text-Based Browsers** (e.g., Lynx) – Display only text, useful for low-bandwidth browsing.

**Functions of a web browser:**

* + Retrieves and displays web pages from the internet.
  + Renders HTML, CSS, and JavaScript.
  + Manages bookmarks, history, and cookies.

**Methods for Installing a Text Editor & Web Browser:**

* + **From Storage Drive** – Install using an offline installer (e.g., a USB drive).
  + **From the Internet** – Download and install the latest version from the official website.

## ****SECTION C: Creating a Web Page in HTML****

**6. What is a website? List two main types of websites.** (4 marks)  
**7. Describe three functions of a website.** (6 marks)  
**8. What does HTML stand for, and why is it important?** (4 marks)  
**9. Define an HTML tag and provide two examples.** (4 marks)

**Solutions:**  
6. **A website** is a collection of web pages linked together under a domain name.

* **Types of websites:**
  1. **Static Website** – Displays fixed content without user interaction.
  2. **Dynamic Website** – Generates content based on user actions (e.g., social media sites).

**Functions of a Website:**

* + **Information Sharing** – Provides details about a business, product, or service.
  + **E-commerce** – Enables online transactions (e.g., Amazon, eBay).
  + **Communication & Interaction** – Allows users to engage via comments, chats, or forums.

**HTML (HyperText Markup Language)** is the standard language for creating web pages.

* + Importance: It provides the basic structure of webpages, including text, images, and links.

**An HTML tag** is a code element used to define webpage content.

* + Examples:
    - <p> – Defines a paragraph.
    - <h1> – Defines a top-level heading.

## ****SECTION D: HTML Tags and Attributes****

**10. What are HTML tag attributes? Provide two examples.** (4 marks)  
**11. Differentiate between block-level and inline HTML elements. Provide one example of each.** (6 marks)  
**12. Explain the function of the following HTML tags:** (6 marks)  
a) <title>  
b) <img>  
c) <a>

**Solutions:**  
10. **HTML tag attributes** provide additional information about an element.

* Examples:
  + href (used in <a> to define link destination).
  + src (used in <img> to specify image path).

1. **Block-Level Elements** start on a new line and take up full width.

* Example: <div> (defines a section).  
  **Inline Elements** stay within a line and only take up necessary space.
* Example: <span> (used for styling text inside a paragraph).

1. **Functions of HTML Tags:**

* <title>: Defines the title of a webpage (shown in the browser tab).
* <img>: Displays an image on a webpage.
* <a>: Creates a hyperlink to another page or section.

## ****SECTION E: Developing a Simple Web Page****

**13. What is the basic structure of an HTML page?** (5 marks)  
**14. Write a simple HTML code that displays “Hello, World!” on a webpage.** (5 marks)  
**15. How do you save an HTML file, and what is its extension?** (3 marks)

**Solutions:**  
13. **Basic Structure of an HTML Page:**

html

CopyEdit

<!DOCTYPE html><html><head>

<title>My First Web Page</title></head><body>

<h1>Welcome to My Website</h1></body></html>

* <!DOCTYPE html> – Declares HTML5 document type.
* <html> – Root element.
* <head> – Contains metadata like title and styles.
* <body> – Contains visible content like text, images, and links.

1. **Simple HTML Code:**

html

CopyEdit

<!DOCTYPE html><html><head>

<title>My First Page</title></head><body>

<h1>Hello, World!</h1></body></html>

* This code creates a webpage that displays **"Hello, World!"** in an <h1> heading.

1. **Saving an HTML File:**

* Use .html as the extension (e.g., index.html).
* Open the file in a **web browser** to view the webpage.

### ****Final Recap****

✔ Covers **definitions, setup, HTML coding, and practical applications**.  
✔ Ensures students understand **website structure and development**.  
✔ Includes **both theoretical and hands-on questions**.

Would you like any modifications or additional topics covered? 😊

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##### You said:

you are missing section (F,G )

###### ChatGPT said:

You're right! Here’s the **complete** exam paper, now including **Sections F and G**, along with **detailed solutions**.

# ****EXAMINATION PAPER: DEVELOP A WEBSITE****

**Learning Outcome 2: Create Web Structures**  
**Total Learning Hours: 70**  
**Instructions:** Answer all questions in their respective sections.

## ****SECTION A: Definition of General Key Terms****

**1. Define the following terms:** (10 marks)  
a) Webpage  
b) Website  
c) Web browser  
d) Text editor  
e) URL

**2. Explain the purpose of a hyperlink in a webpage.** (2 marks)

### ****Solutions:****

* + **Webpage**: A single document on the internet, typically written in HTML and displayed in a web browser.
  + **Website**: A collection of related webpages hosted under a single domain name.
  + **Web browser**: Software that retrieves and displays web pages from the internet (e.g., Chrome, Firefox).
  + **Text editor**: A program used to write and edit code for webpages (e.g., VS Code, Sublime Text).
  + **URL (Uniform Resource Locator)**: The unique address used to access a webpage on the internet.

**A hyperlink** allows users to navigate between different webpages or sections of a webpage by clicking on a linked text, image, or button.

## ****SECTION B: Setting Up a Text Editor and Web Browser****

**3. List three examples of text editors used for web development.** (3 marks)  
**4. What are the two main types of web browsers? Explain their functions.** (6 marks)  
**5. Describe two methods for installing a text editor and a web browser.** (6 marks)

### ****Solutions:****

Examples of text editors:

* + **Visual Studio Code**
  + **Sublime Text**
  + **Notepad++**

**Types of Web Browsers:**

* + **Graphical Browsers** (e.g., Chrome, Firefox) – Display multimedia content, support JavaScript, CSS.
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**Methods for Installing a Text Editor & Web Browser:**

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## ****SECTION C: Creating a Web Page in HTML****

**6. What is a website? List two main types of websites.** (4 marks)  
**7. Describe three functions of a website.** (6 marks)  
**8. What does HTML stand for, and why is it important?** (4 marks)  
**9. Define an HTML tag and provide two examples.** (4 marks)

### ****Solutions:****

**A website** is a collection of web pages linked together under a domain name.

* + **Types of websites:**
    1. **Static Website** – Displays fixed content without user interaction.
    2. **Dynamic Website** – Generates content based on user actions (e.g., social media sites).

**Functions of a Website:**

* + **Information Sharing** – Provides details about a business, product, or service.
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  + **Communication & Interaction** – Allows users to engage via comments, chats, or forums.

## ****SECTION D: HTML Tags and Attributes****

**10. What are HTML tag attributes? Provide two examples.** (4 marks)  
**11. Differentiate between block-level and inline HTML elements. Provide one example of each.** (6 marks)  
**12. Explain the function of the following HTML tags:** (6 marks)  
a) <title>  
b) <img>  
c) <a>

### ****Solutions:****

1. **HTML tag attributes** provide additional information about an element.

* Examples:
  + href (used in <a> to define link destination).
  + src (used in <img> to specify image path).

1. **Block-Level Elements** start on a new line and take up full width.

* Example: <div> (defines a section).  
  **Inline Elements** stay within a line and only take up necessary space.
* Example: <span> (used for styling text inside a paragraph).

## ****SECTION E: Developing a Simple Web Page****

**13. What is the basic structure of an HTML page?** (5 marks)  
**14. Write a simple HTML code that displays “Hello, World!” on a webpage.** (5 marks)  
**15. How do you save an HTML file, and what is its extension?** (3 marks)

### ****Solutions:****

1. **Basic Structure of an HTML Page:**

html

CopyEdit

<!DOCTYPE html><html><head>

<title>My First Web Page</title></head><body>

<h1>Welcome to My Website</h1></body></html>

1. **Simple HTML Code:**

html

CopyEdit

<!DOCTYPE html><html><head>

<title>My First Page</title></head><body>

<h1>Hello, World!</h1></body></html>

* This code creates a webpage that displays **"Hello, World!"** in an <h1> heading.

## ****SECTION F: Using HTML Page Structure and Extensions****

**16. What is the purpose of the** <!DOCTYPE html> **declaration?** (3 marks)  
**17. What file extension is used to save an HTML document?** (2 marks)  
**18. Explain how a web browser processes an HTML file.** (5 marks)

### ****Solutions:****

1. **Purpose of** <!DOCTYPE html>**:**

* Defines the document type as **HTML5** to ensure proper rendering.

**HTML files are saved with the** .html **or** .htm **extension.**

**How a Web Browser Processes an HTML File:**

* Reads the HTML document line by line.
* Interprets tags and applies styles (CSS).
* Executes scripts (JavaScript).
* Renders content visually for users.

## ****SECTION G: Displaying Contents Using a Web Browser****

**19. Describe the steps to open an HTML file in a web browser.** (5 marks)  
**20. Name two ways to preview a webpage during development.** (4 marks)

### ****Solutions:****

1. **Steps to Open an HTML File in a Browser:**

* Open the **text editor** and create an HTML file (e.g., index.html).
* Save the file in a known location.
* Right-click the file and select **"Open with"**, then choose a browser.

1. **Ways to Preview a Webpage During Development:**

* **Using a Web Browser** – Open the saved .html file.
* **Live Server Extension in VS Code** – Automatically refreshes on file changes.

## ****Final Recap****

✔ **Includes Sections A-G** covering all **key concepts, HTML coding, and practical applications**.  
✔ **Balanced mix of theory and hands-on coding** to test **real-world web development skills**.  
✔ **Clear explanations for each answer** to help with **exam preparation**.

Would you like me to modify anything further? 😊

4o

##### You said:

✓ Developing webpage using HTML tag categories Formatting tags Table tags Form tags Heading tags List tags Media tags Code tags HTML frame tags HTML Comment Grouping tags (div, span) ✓ Use of Hyperlinks Syntax Default link appearance Types ✓ Use of HTML graphics Canvas tags SVG tags • Managing page layout in HTML ✓ Definition of page layout ✓ Parts of webpage ✓ Use HTML tags to organise page layout • Optimizing webpage in HTML ✓ Definition of optimization ✓ Benefit of applying SEO on webpage ✓ Use HTML tags to optimize webpage Meta Title Heading Image alt HTML semantic tags ✓ Web accessibility HTML Role Test and Standard Validation

###### ChatGPT said:

Memory updated

Got it! I'll make sure to include exam questions and solutions for these topics as well. Do you want me to format them in the same **section-based structure (A-G)** as before? 😊

4o

##### You said:

YES

###### ChatGPT said:

Great! Here's your **exam paper** covering all the topics in **Learning Outcome 2: Create Web Structures**, following the **section-based structure (A-G)** with **detailed solutions**.

# ****EXAMINATION PAPER: DEVELOP A WEBSITE****

**Learning Outcome 2: Create Web Structures**  
**Total Learning Hours: 70**  
**Instructions:** Answer all questions in their respective sections.

## ****SECTION A: Developing a Webpage Using HTML Tag Categories****

**1. Define the following HTML tag categories and give one example for each:** (10 marks)  
a) Formatting tags  
b) Table tags  
c) Form tags  
d) Heading tags  
e) List tags

**2. Write an HTML code snippet using:** (10 marks)  
a) <table> to display student names and scores.  
b) <form> to collect user email and password.

### ****Solutions:****

* + **Formatting Tags**: Used to style text (e.g., <b> for bold text).
  + **Table Tags**: Define tabular data (e.g., <table> to create a table).
  + **Form Tags**: Used to collect user input (e.g., <input> for input fields).
  + **Heading Tags**: Define headings (e.g., <h1> for main titles).
  + **List Tags**: Create ordered/unordered lists (e.g., <ul> for bullet points).

**a) Table Example:**

html

CopyEdit

<table border="1">

<tr>

<th>Name</th>

<th>Score</th>

</tr>

<tr>

<td>Alice</td>

<td>85</td>

</tr>

<tr>

<td>Bob</td>

<td>90</td>

</tr></table>

**b) Form Example:**

html

CopyEdit

<form>

Email: <input type="email" name="email"><br>

Password: <input type="password" name="password"><br>

<input type="submit" value="Login"></form>

## ****SECTION B: Use of Hyperlinks****

**3. Define a hyperlink and explain its importance.** (4 marks)  
**4. Write the HTML syntax for creating a hyperlink that opens in a new tab.** (3 marks)  
**5. List two types of hyperlinks used in HTML.** (4 marks)

### ****Solutions:****

**Hyperlink**: A clickable element (text, image) that navigates users to another webpage.

* + **Importance**: Enhances navigation and connectivity between webpages.

**Syntax for opening a link in a new tab:**

html

CopyEdit

<a href="https://example.com" target="\_blank">Visit Example</a>

**Types of Hyperlinks:**

* + **Internal Links**: Links to another section within the same website.
  + **External Links**: Links to another website.

## ****SECTION C: Use of HTML Graphics****

**6. Differentiate between** <canvas> **and** <svg> **elements.** (4 marks)  
**7. Write an HTML example of a simple SVG rectangle.** (5 marks)

### ****Solutions:****

* + **Canvas**: Uses JavaScript to draw graphics dynamically.
  + **SVG**: Uses XML to define vector graphics.

**SVG Rectangle Example:**

html

CopyEdit

<svg width="200" height="100">

<rect width="200" height="100" style="fill:blue;"/></svg>

## ****SECTION D: Managing Page Layout in HTML****

**8. Define webpage layout and list three parts of a webpage.** (6 marks)  
**9. Name two HTML tags used to organize page layout.** (4 marks)

### ****Solutions:****

**Webpage layout** refers to the arrangement of content on a webpage.

* + **Parts of a Webpage:**
    1. **Header** – Contains the website title/logo.
    2. **Main Content** – Holds text, images, and videos.
    3. **Footer** – Includes contact information and links.

**HTML Layout Tags:**

* + <div> (used for grouping sections).
  + <section> (defines a section).

## ****SECTION E: Optimizing a Webpage in HTML****

**10. What is webpage optimization, and why is it important?** (4 marks)  
**11. Name three HTML elements used for SEO optimization.** (6 marks)  
**12. Write an HTML snippet using the** <meta> **tag for SEO optimization.** (5 marks)

### ****Solutions:****

**Webpage Optimization** improves page loading speed, user experience, and SEO rankings.

**HTML elements for SEO:**

* <meta> (provides search engines with page descriptions).
* <title> (defines the page title).
* <alt> (adds alternative text for images).

1. **SEO Meta Tag Example:**

html

CopyEdit

<meta name="description" content="Learn web development with our tutorials.">

## ****SECTION F: Web Accessibility****

**13. Define web accessibility and explain its significance.** (4 marks)  
**14. List two HTML roles used to improve accessibility.** (4 marks)  
**15. What is standard validation in web accessibility testing?** (4 marks)

### ****Solutions:****

1. **Web Accessibility** ensures websites can be used by people with disabilities.

* **Significance**: Makes the internet inclusive and legally compliant.

1. **HTML Roles for Accessibility:**

* role="navigation" (Defines navigation menus).
* role="button" (Indicates a clickable button).

1. **Standard Validation**:

* Uses tools like **W3C Validator** to check HTML for accessibility compliance.

## ****SECTION G: Testing and Displaying Webpages****

**16. How do you preview an HTML webpage in a browser?** (4 marks)  
**17. Name two tools used for testing webpage performance.** (4 marks)

### ****Solutions:****

1. **Preview an HTML Page:**

* Save the file as .html.
* Open it with a browser (Chrome, Firefox).

1. **Webpage Testing Tools:**

* **Google PageSpeed Insights** – Tests performance and optimization.
* **Lighthouse** – Analyzes site speed, SEO, and accessibility.

## ****Final Recap****

✔ **Covers all topics from Sections A-G** for complete exam preparation.  
✔ **Includes coding questions** to test practical HTML skills.  
✔ **Detailed solutions** for a strong understanding of key concepts.

Would you like any modifications or additions? 😊

4o

##### You said:

Learning outcome 3: Style web elements Learning hours: 60 Indicative content • Introduction to CSS ✓ Definition ✓ Utility ✓ Types • Creating CSS files ✓ CSS syntax Selector Declaration ✓ Use of CSS style types Inline Internal External Imported ✓ Use CSS Visual rules Font Text Colors and background colors Opacity Background image ✓ Use CSS Display and positioning Relative Absolute Fixed Sticky Block ✓ Use CSS Box model Height and width Borders Border radius Padding 6 | P a g e Employable Skills for Sustainable Job Creation Margin Visibility Auto • Applying Typography on webpage ✓ Introduction to typography ✓ Use CSS scripts for typography ✓ Use HTML tags required for typography ✓ Embed and position project object in webpage content • Setting media query rules ✓ Description of media query rules Definition Identify the device types ✓ Use of breakpoint For Desktop For Tablet For Smartphone ✓ Media orientation Portrait Landscape ✓ Hide elements with media queries ✓ Variable Font Size

###### ChatGPT said:

Memory updated

Would you like me to create an exam paper with **questions and solutions** for Learning Outcome 3: **Style Web Elements**, following the same **section-based structure (A-G)** as before? 😊

4o

##### You said:

YES

###### ChatGPT said:

Here’s your **exam paper** for **Learning Outcome 3: Style Web Elements**, structured into **sections A-G** with **detailed solutions**.

# ****EXAMINATION PAPER: DEVELOP A WEBSITE****

**Learning Outcome 3: Style Web Elements**  
**Total Learning Hours: 60**  
**Instructions:** Answer all questions in their respective sections.

## ****SECTION A: Introduction to CSS****

**1. Define CSS and explain its utility in web development.** (5 marks)  
**2. List and briefly explain three types of CSS.** (6 marks)

### ****Solutions:****

**Definition of CSS**:

* + CSS (Cascading Style Sheets) is a language used to style HTML elements.
  + **Utility**: Enhances webpage appearance, ensures consistency, and improves user experience.

**Types of CSS:**

* + **Inline CSS**: Applied directly within an HTML tag using the style attribute.
  + **Internal CSS**: Defined within a <style> tag in the HTML <head>.
  + **External CSS**: Stored in a separate .css file and linked using <link>.

## ****SECTION B: Creating CSS Files****

**3. Write the basic syntax of a CSS rule and explain its components.** (5 marks)  
**4. What are CSS selectors? Give two examples.** (4 marks)

### ****Solutions:****

**CSS Syntax:**

css

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selector {

property: value;

}

* + **Selector**: Targets HTML elements.
  + **Property**: Defines the style attribute (e.g., color).
  + **Value**: Specifies the property setting (e.g., red).

**CSS Selectors:**

* + **Element Selector**: Targets elements by name (e.g., p {color: blue;}).
  + **Class Selector**: Targets elements by class (.example {font-size: 20px;}).

## ****SECTION C: Using CSS Visual Rules****

**5. Write a CSS rule to:** (10 marks)  
a) Change text color to blue.  
b) Set background color to light gray.  
c) Set font size to 18px.  
d) Apply opacity of 0.5.  
e) Set a background image from background.jpg.

### ****Solutions:****

css

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p {

color: blue;

background-color: lightgray;

font-size: 18px;

opacity: 0.5;

background-image: url('background.jpg');

}

## ****SECTION D: Using CSS Display and Positioning****

**6. Explain the following CSS position values with examples:** (10 marks)  
a) Relative  
b) Absolute  
c) Fixed  
d) Sticky  
e) Block

### ****Solutions:****

* **Relative**: Position relative to its normal place.

css

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div { position: relative; top: 10px; }

* **Absolute**: Positioned relative to the nearest positioned ancestor.

css

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div { position: absolute; top: 0; right: 0; }

* **Fixed**: Stays fixed in the viewport.

css

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div { position: fixed; bottom: 0; }

* **Sticky**: Sticks to the viewport when scrolling.

css

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div { position: sticky; top: 50px; }

* **Block**: Takes up full width by default.

css

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div { display: block; }

## ****SECTION E: Using the CSS Box Model****

**7. Define the CSS Box Model and list its components.** (5 marks)  
**8. Write a CSS rule that sets:** (5 marks)

* Height to 200px
* Width to 300px
* Border radius to 10px
* Padding of 20px
* Margin of 10px auto

### ****Solutions:****

**CSS Box Model Components:**

* + **Content**: The actual content inside an element.
  + **Padding**: Space between content and border.
  + **Border**: Surrounds padding and content.
  + **Margin**: Space outside the border.

**CSS Rule:**

css

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div {

height: 200px;

width: 300px;

border-radius: 10px;

padding: 20px;

margin: 10px auto;

}

## ****SECTION F: Applying Typography on Webpage****

**9. What is typography, and why is it important in web design?** (5 marks)  
**10. Write a CSS rule to set:** (5 marks)

* Font family to Arial
* Font size to 16px
* Line height to 1.5
* Text alignment to center

### ****Solutions:****

**Typography** is the art of styling text to enhance readability and appearance.

* + **Importance**: Improves aesthetics, readability, and accessibility.

**CSS Rule for Typography:**

css

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p {

font-family: Arial, sans-serif;

font-size: 16px;

line-height: 1.5;

text-align: center;

}

## ****SECTION G: Setting Media Query Rules****

**11. Define a media query and explain its use in responsive design.** (5 marks)  
**12. Write a media query for a smartphone screen (max-width: 600px) that hides a sidebar.** (5 marks)

### ****Solutions:****

1. **Media Query**: A CSS technique that applies styles based on screen size, resolution, or device type.

* **Use**: Ensures responsive and adaptive web design.

1. **Media Query for Smartphone:**

css

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@media (max-width: 600px) {

.sidebar {

display: none;

}

}

## ****Final Recap****

✔ Covers all **Learning Outcome 3** topics.  
✔ **Practical CSS questions** to strengthen hands-on skills.  
✔ **Detailed solutions** for a clear understanding.

Would you like any modifications or additions? 😊