



University of Kelaniya – Sri Lanka
Centre for Distance & Continuing Education
Bachelor of Science (General) External
Third year first semester examination - 2019
2024 September
Faculty of Science
COSC 36603 - Web and Internet Technologies

No. of Questions: **Four (04)**

No. of Pages: **Three (03)**

Time: **Two and half (02 ½)**

Answer ALL questions.

1. a) (i) Briefly describe the role of a markup tag in HTML.
(ii) What is the use of the *meta* tag in HTML?
(iii) What is the use of the *target* attributes? How do you use the same target for all the links on a web page?
- b) (i) What is meant by a *Character Entity*?
(ii) With the aid of coding examples, state the two forms of HTML codes, which are used to display a character entity on a web browser.
(iii) What is the purpose of using *cellpadding* and *cellspacing* attributes in HTML tables?
- c) Write down HTML code for the following scenarios.
(i) Create a text-area for 10 rows and 20 columns.
(ii) Create a button to delete all data in the form fields once it is clicked.
(iii) When you click on an image (logo.png), it will direct you to their company website (<https://www.mycompany.lk>). The website will open in a new window. The link text is "visit us". The alternative text for the image is "company logo".
(iv) Create a list of three courses that you have followed in this semester with numbering of uppercase roman letters starting from II. (ex: II,III, IV)
(v) Two checkboxes to select either COSC 36603 or COSC 36593 or both.
2. a) (i) What is the importance of the HTML DOCTYPE?
(ii) What is column spanning and row spanning in HTML?
(iii) Briefly describe the usage of each of the following HTML tags.
a. `<pre> ... </pre>`
b. `<ins> ... </ins>`
c. `<hr>... </hr>`
d. `<blockquote>... </blockquote>`

- b) Create the following list using HTML. Use appropriate styles.

- Coffee
- Tea
 - Black tea
 - Green tea
 - China
 - Africa
- Milk

- c) Write an HTML code to create the following form.

Course Registration

First Name:

Last Name:

Contact Number:

NIC:

Address:

Type your address

Sex: Male Female

Course:

Email:

- (i) “Course” drop down menu has four options: Diploma in Accounts, Diploma in Software Engineering, Diploma in Marketing, and Diploma in Artificial Intelligence. “Diploma in Accounts” is the default value.
- (ii) Use appropriate alignments and formatting.
3. a) (i) What is the purpose of using Cascading Style Sheets (CSS) in development of web pages?
- (ii) List three ways of inserting a Cascading Style Sheets (CSS) to a web page using suitable examples.
- (iii) Briefly explain the statement “CSS saves a lot of work”.
- b) (i) Compare and contrast the following CSS rules.
display: none
visibility: hidden
- (ii) With the aid of a suitable example briefly describe the structure of CSS box model.
- (iii) What is meant by *image sprite* in CSS?
- c) Write the required external CSS rules to accomplish each of the following.
- (i) Set the image *trees.jpg* as the background image of the webpage. The background image should be repeated vertically and kept fixed.
- (ii) Using shorthand property set the following styles only for the left border.
color of the border: red

width of the border :medium
style of the border: double

- (iii) Set the text color of all headings to #ff4d4d and the background color of all the headings to #6666ff.
 - (iv) Set the font of all the levels of headings and paragraphs to “Times New Roman”.
4. a)
- (i) What is the purpose of using the pseudo class in CSS?
 - (ii) By using an appropriate example, briefly describe the usage of each of the following pseudo classes.
 - a. : first-child
 - b. : lang
 - c. : hover
 - d. : focus
- b)
- (i) Describe the difference between *id selector* and *class selector*.
 - (ii) Briefly describe four CSS positioning methods.
 - (iii) Name the CSS properties to be used in the following situations.
 - a. To create a scroll bar when an element’s content is too big to fit in a specified area.
 - b. Pushing an element to the left or right, allowing other elements to wrap around it.
- c)
- (i) Compare block elements with inline elements. How can you change a block element into an inline element and an inline element into a block element using CSS?
 - (ii) Using the knowledge of pseudo-classes, answer the following questions.
 - a. The link to a medical center is given as <http://www.medicare.lk> and a user can visit the website by clicking “For more info” text. If the link above has been visited, it should be displayed in red. Create a pseudo-class with a CSS class to accomplish this task.
 - b. Set the font size and font style of the first letter of all paragraphs to 25px and italic respectively. Set the text in the first line of all paragraphs to green color. Turn every letter in all paragraphs to uppercase.

-----END OF QUESTION PAPER-----

