

UNIVERSITY OF RUHUNA

BACHELOR OF COMPUTER SCIENCE (GENERAL) DEGREE LEVEL I
(SEMESTER I)

EXAMINATION – July/August 2014

SUBJECT: COMPUTER SCIENCE

COURSE UNIT: CSC 113α (Internet Services and Web Development)

TIME: 1 hour

Answer two questions only.

1.

- a. Write four advantages of developing and maintaining web standards.
- b. Write suitable HTML code segments to accomplish each of the following tasks.
 - i. Link the text “Schools in Sri Lanka” to URL “www.schoolnet.lk” to create a hyperlink and open it in a new window.
 - ii. Insert an image flag.jpg with an alternate text “SLFlag” and set the width of the image as 100 px. (Assume the image is stored in the same folder as the html file).
 - iii. Create an empty table with three columns and three rows. Give the title of the table as “Sales Summary”. The first two cells of the second column need to merge.
 - iv. Create the following list as a Description List.
 - Cakes
 - Black Forest
 - Carrot Cake
 - Pudding
 - Chocolate Bread
 - Chocolate Tower
- c.
 - i. Give two situations where POST method is preferred than GET method.
 - ii. Write HTML code to design following form.

Student ID	<input type="text"/>
Choose Course Units	
<input type="checkbox"/>	COM 3113
<input type="checkbox"/>	COM 3232
<input type="checkbox"/>	COM 3633
<input type="button" value="Submit"/>	<input type="button" value="Reset"/>

2.

a.

- i. Explain the importance of Client Side Scripting Language in web development.
- ii. Write JavaScript code to input Fahrenheit value using prompt box (as depicts in Figure 1), and covert into centigrade value of it and display the result (as depicts in Figure 2) on the same web page. You are required to write a separate function to calculate the centigrade value of any given Fahrenheit value.

Use following formula to perform the conversion from Fahrenheit value to Centigrade Value:

$$\text{Centigrade Value} = \frac{5}{9} \times (\text{Fahrenheit Value} - 32)$$

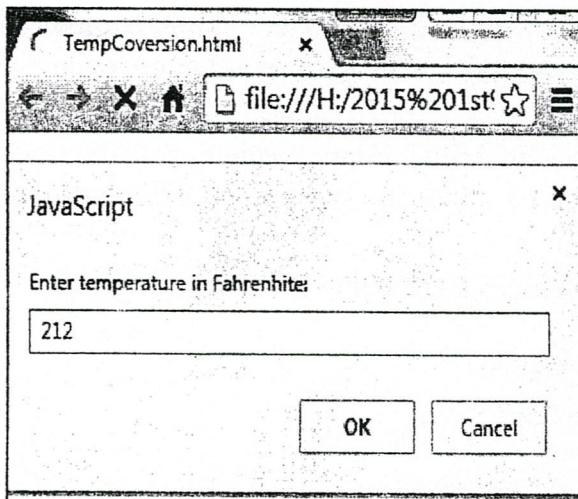


Figure 01

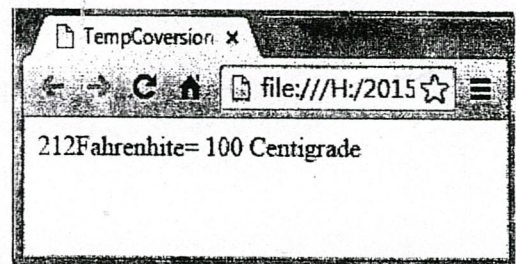


Figure 02

b. Explain following JavaScript built-in functions using suitable examples.

- i. parseFloat()
- ii. math.round()

c. Write JavaScript code to get the following output using nested for loop.

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

3.

a.

- i. Write two advantages of using external style sheets (CSS) in web development.
- ii. What are Pseudo-classes in CSS? Explain three types of CSS Pseudo classes used in hyperlinks.

b. Write html code to design a menu given in Figure 03 with embedded styles. Use attributes and values given in the table 01 for the embedded styles.

Selector	Attribute	Value
ul	float width padding margin List style type	Left 100% 0 0 none
a	float width text decoration text color background color padding border right	Left 6em None White Purple 0.2em 0.6em 1px solid white

Table 01: Attributes with Values needed to design the horizontal menu



Figure 03

c. Briefly describe each of the following terms.

- i. Domain Name System
- ii. Broadband Internet Connection
- iii. Web Server
- iv. IP Address