WEB TECHNOLOGY (MCAP 2202)

Time Allotted : 3 hrs

Full Marks: 70

Figures out of the right margin indicate full marks.

Candidates are required to answer Group A and <u>any 5 (five)</u> from Group B to E, taking <u>at least one</u> from each group.

Candidates are required to give answer in their own words as far as practicable.

Group – A (Multiple Choice Type Questions)

1. Choose the correct alternative for the following:

 $10 \times 1 = 10$

(i)	HTTP is protocol. (a) application layer (c) network layer	(b) transport layer (d) session layer
(ii)	Which operation cannot be performed o (a) DROP (c) CREATE	n XML schema collection? (b) DELETE (d) UPDATE
(iii)	If para1 is the DOM object for a paragraph, what is the correct syntax to change the text within the paragraph? (a) "MCA SEM IV"? (b) para1.value=" MCA SEM IV "; (c) para1.firstChild.nodeValue=" MCA SEM IV "; (d) para1.nodeValue=" MCA SEM IV ";	
(iv)	What is the correct HTML for creating a (a) <check> (c) <checkbox></checkbox></check>	checkbox? (b) <input type="checkbox"/> (d) <input type="check"/>
(v)	What is the correct HTML for creating a text input field?(a) <textinput type="text">(b) <input type="textfield"/>(c) <input type="text"/>(d) <textfield></textfield></textinput>	
(vi)	How can you create a numbered list? (a) <dl> (c) <list></list></dl>	(b) (d)
(vii)	In css what does "font-size" can be callec (a) selector (c) property	l as (b) rule (d) property-name

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- (viii) In CSS, how do you select an element with id "demo"?
 (a) #demo
 (b) demo
 (c) .demo
 (d) *demo
- (ix) Which event occurs when the user clicks on an HTML element?
 (a) onchange
 (b) onmouseclick
 (c) onclick
 (d) onmouseover
- (x) Variables are declared in JavaScript using which of the following?
 (a) dim
 (b) var
 (c) dimension
 (d) variable

Group – B

- 2. (a) What is the web application? Describe the types of web applications with suitable example.
 - (b) In Hypertext Markup Language (HTML) what does the terms 'hypertext' and 'markup' specify?
 - (c) What is client-server architecture and what are its types?

(2+4) + 2 + 4 = 12

- 3. (a) How do I create frames? What is a frameset?
 - (b) Create one HTML Form with one button element. On click of that the button it will display one alert message "Welcome to Web Tech Exam".
 - (c) Describe any two new features of html5? what is the < !doctype > ? is it necessary to use in html5 ?

4 + 4 + 4 = 12

Group – C

- 4. (a) Write CSS to achieve each of the following:
 - Add a background image to an HTML page, so that image does not scroll with the scrolling text.
 - Make all the elements in a page bold and italic.
 - Specify the font for a paragraph.
 - Display a hyperlink without an underline.
 - (b) Compare and contrast between external CSS and internal CSS with proper examples.

8 + 4 = 12

5. (a) How is XML different from HTML? What are the advantages of XML compared to HTML?

 (b) Create an XML document with the following specification: Root element is emp. Root element contains more than one employee element. Each employee has EmpName, EmpId, Gender and Address. Address has Street, City, Postalcode. Retrieve the employee details to display their name and address using XML Parser. Draw the XML Tree structure of the above database.

(2+2)+8=12

Group – D

- 6. (a) Explain with example how you can add and remove element from an HTML page with JavaScript.
 - (b) Write JavaScript program that accepts a string as a parameter and converts the first letter of each word of the string in upper case.
 INPUT : the students of mca second year
 OUTPUT : The Students Of Mca Second Year

5 + 7 = 12

- 7. (a) Explain PHP Magic constants with example.
 - (b) Explain the following global variable with a suitable example
 - \$_SERVER,
 - \$_FILES,
 - **\$_COOKIE**,
 - \$_SESSION.
 - (c) Why \$_REQUEST variable is used?

2 + 8 + 2 = 12

Group – E

- 8. Write a PHP file that can be added to other PHP files using the include or require functions. This file should:
 - Make a connection to a MySQL database, and log in with valid credentials. The connection resource should be stored in a variable with an appropriate name.
 - Create a database CAC_MCA if it does not exist.
 - Select the CAC_MCA database.
 - Create a table STUDENT2ndY with the following fields:
 - USERNAME VARCHAR(100)
 - PASSWORD HASH CHAR(40)
 - PHONE VARCHAR(10)
 - The USERNAME field should be designated as UNIQUE.

If any of these operations cause an error, stop execution and print the error message.

12

9. (a) Create the pages for fruits and vegetables, write the program to display the selected item in separate page using cookies.

(b) What is Denial of Service? How can one generate such attack? Write down the security solutions to avoid such attacks.

6 + 6 = 12

Department & Section	Submission Link
МСА	https://classroom.google.com/c/MzcxNzUxOTE1ODkx/a/MzA1OTg0MzA4MzA0/details