**SENECA COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SCHOOL OF INFORMATION AND COMMUNICATIONS TECHNOLOGY – SY**

**FINAL EXAMINATION**

TERM Summer 2017

Course WEB 222

NAME:

STUDENT NUMBER:

SECTION:

DATE: Wednesday, June 14, 2017

TIME ALLOWED: 50 Minutes

**SPECIAL INSTRUCTIONS:**

1. Manage your time carefully.
2. This is a closed-book exam; therefore, you cannot use any materials.
3. Please use the question pages to write down your answer.
4. For multiple choice questions, draw a circle around the correct answer.

This exam includes a *cover page*, plus 4 pages of *question*.

**Cheat-Sheet is attached to this booklet**

1. The DOM presents an HTML document as a \_\_\_\_\_\_\_\_\_\_.
   1. Hash table structure
   2. Dynamic structure
   3. Tree structure
   4. None of above
2. According to the DOM, everything in an HTML document is a \_\_\_\_\_\_\_\_\_\_.
   1. Tree
   2. Node
   3. Table
   4. Branches
3. You can find the element you want to manipulate in \_\_\_\_\_\_\_\_\_\_ way?
   1. getElementById()
   2. getElementsByTagName()
   3. All of these
   4. None of these
4. In the DOM, every node has some properties that contain some information about each node. The properties are:
   1. nodeName
   2. nodeValue
   3. nodeType
   4. All of these
5. Which of the following returns the <html> element?
   1. Document.getHtmlNode()
   2. Document.documentElement
   3. Element.rootElement()
   4. Element.documentElement

***For the following questions, you may use the cheat-sheet attached***

1. Which of the following statements in NOT true about the “Document” object?
   1. It the root node of the HTML document
   2. When an HTML document is loaded into a web browser, it becomes a document object.
   3. Can be accessed by calling document.getElementById()
   4. Provides properties and methods to access all node objects, from within JavaScript.
2. The “document.anchors” returns:
   1. All children of the first <a> element found in the document.
   2. A collection of all <a> elements in the document.
   3. Sets or returns the document’s body
   4. Returns all name/value pairs of cookies in the document
3. Which of the following is syntactically correct?
   1. Document.createElement(“BUTTON”).className;
   2. Document.createElement(“BUTTON”).value;
   3. Document.createAttribute(“color”).attributes;
   4. Document.getNamedItem(“BUTTON”);
4. Which of the following is the proper way of assigning a listener to an element?
   1. Docment.addEventListener(“click”, void function());
   2. Element.addEventListener(“click”, new function());
   3. Document.addEventListener(“click”, function() {var a=3;});
   4. Element.addEventListener(“click”, function() {console.log(“Event Handled”)});
5. What is the correct JavaScript syntax to change the content of the HTML element below?
   1. Document.getElement(“p”).innerHTML = “Hello World!”;
   2. Document.getElementByName(“p”).innerHTML = “Hello World!”;
   3. Document.getElementById(“demo”).innerHTML = “Hello World!”;
6. What is the correct way to write a JavaScript array?
   1. Var colors = “red”, “green”, “blue”;
   2. Var colors = (1:”red”, 2:”green”, 3:”blue”);
   3. Var colors = [“red”, “green”, “blue”];

***In the following questions, assume that there is only one <font> tag in our DOM tree***

***Please use console.log() to produce output where needed in the following questions***

1. In the following box, write down the expression to show if the size attribute has been set for the <font> element.

|  |
| --- |
| Document.getElementsByTagName(“font”)[0].hasAttribute(“size”); |

1. Write down an expression to show the number of attributes assigned to this <font> tag.

|  |
| --- |
| Document.getElementsByTagName(“font”)[0].attributes.length; |

1. Write down an expression that returns the first child of this <font> tag.

|  |
| --- |
| Document.getElementsByTagName(“font”)[0].firstChild() |

1. Write down an expression that outputs the value assigned to ***size*** attribute assigned to this <font> tag. (Assume that a value is assigned to ***size*** attribute)

|  |
| --- |
| Document.getElementsByTagName(“font”).getAttribute(“size”); |

1. In the following box, write down a JavaScript expression to print out the number of <image> tags in a DOM tree.

|  |
| --- |
| Document.images.length; |

1. Assume that there is only one table in the DOM tree. Write down a small JavaScript code fragment to add one row to this table. (Specify pre-condition on the number of existing columns)
2. There is ONLY one <button> element in our DOM tree and the label on the button is: “Fun Button”. Write down a JavaScript expression the outputs the text on this button.

|  |
| --- |
| Console.log(Document.getElementsByTagName(“button”)[0].innerHTML) |

1. Write a JavaScript function that clears the screen.

|  |
| --- |
| For(var I = 0 to Document.documentElement.childElementCount) {  Document.documentElement.removeChild(Document.documentElement.children[i])  } |

1. Develop a JavaScript function that takes a DOM element as argument and reverses the order of its children, i.e. first child becomes last child, second child becomes one before last child, etc.

|  |
| --- |
| Var num\_child = element.childNodes.length;  Var children = element.childNodes;  For(var I = 0; I < num\_child; i++)  {  Elem.removeChild(children[i]);  }  For(var I = num\_children-1 ; I >= 0; i--)  {  Elem.appenChild(children[i])  } |