

CSE102 – Introduction to Web Design and Programming

Midterm-1 Exam

Section A: Multiple choice questions (2 points each * 25 questions = 50 points)

1. Which of the following is incorrect IPv4 address?
 - a) 132.121.38.172
 - b) 99.76.44.243
 - c) 154.324.120.87
 - d) 127.0.0.1
2. Which command is used for determining the IP address of a domain name?
 - a) domainlookup
 - b) iplookup
 - c) nslookup
 - d) domaintoip
3. Which port number is commonly used by HTTP Internet service?
 - a) 25
 - b) 22
 - c) 8888
 - d) 80
4. What does HTML stand for?
 - a) Hyper Text Markup Language
 - b) Home Tool Markup Language
 - c) Hyperlinks and Text Markup Language
 - d) Hyper Type Markup Language
5. Who is making the Web standards?
 - a) Mozilla
 - b) Microsoft
 - c) The World Wide Web Consortium
 - d) Netscape
6. What does CSS stand for?
 - a) Creative Style Sheets
 - b) Colorful Style Sheets
 - c) Computer Style Sheets
 - d) Cascading Style Sheets

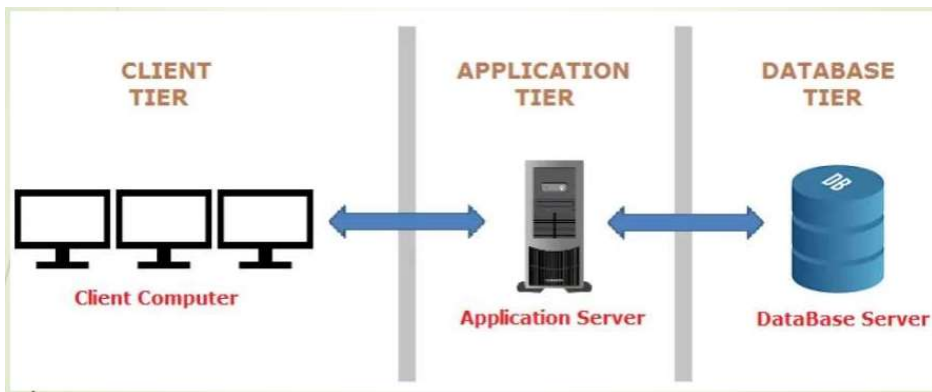
7. You can use the same class on multiple elements.
- a) True
 - b) False
8. Which is the correct CSS syntax?
- a) body:color=black
 - b) {body;color:black}
 - c) {body:color=black(body)}
 - d) **body {color: black}**
9. How do you insert a comment in a CSS file?
- a) this is a comment
 - b) **/* this is a comment */**
 - c) // this is a comment
 - d) // this is a comment //
10. What is the correct HTML for inserting an image?
- a)
 - b) <image src="image.gif" alt="MyImage">
 - c) ****
 - d)
11. How can you make a list that lists the items with numbers?
- a) **ol**
 - b) dl
 - c) ul
 - d) list
12. How can you open a link in a new browser window?
- a) ****
 - b)
 - c)
 - d)
13. Choose the correct HTML tag for the largest heading.
- a) head
 - b) **h1**
 - c) h6
 - d) header

14. Each element can have only one ID and Each page can have only one element with that ID.
- a) True
 - b) False
15. What is the correct HTML for creating a hyperlink?
- a) `W3Schools.com`
 - b) `W3Schools`
 - c) `<a>http://www.w3schools.com`
 - d) `W3Schools.com`
16. The page title is inside the ____ tag.
- a) Body
 - b) Head
 - c) Division
 - d) Table
17. In what form are CSS style rules presented?
- a) `selector { property: value }`
 - b) `selector { property= value }`
 - c) `selector (property: value)`
 - d) `selector (property= value)`
18. Which CSS property applies a color to text?
- a) text-color
 - b) foreground-color
 - c) background-color
 - d) color
19. What does the ID selector do?
- a) Apply the style to a specific element
 - b) Apply the style to all the elements
 - c) Apply the style to a group of elements
 - d) Apply the style to elements of the same type
20. What selector should you use when applying a style to multiple elements?
- a) ID
 - b) Class
 - c) Type
 - d) Any of the above

21. Which of the following attributes of the tag displays alternate text for the image?
- a) caption
 - b) text
 - c) alt
 - d) identify
22. Where in the HTML document is the correct place to refer to an external style sheet?
- a) In the <body> section
 - b) At the top of the document
 - c) In the <head> section
 - d) At the end of the document
23. Which HTML tag is used to define an internal style sheet?
- a) <css>
 - b) <style>
 - c) <script>
 - d) <a>
24. Which HTML attribute is used to define inline styles?
- a) class
 - b) style
 - c) styles
 - d) font
25. Which method is ideal for applying the same style to an entire website?
- a) Internal CSS
 - b) Inline CSS
 - c) External CSS
 - d) All of the above

Section B: Descriptive questions (4 given, answer any 3 questions. 5 points each * 3 questions = 15 points)

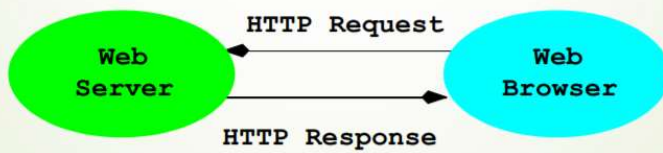
1. Draw the three-tier architecture of web applications and explain each of the components briefly.



2. HTTP working

HTTP Transaction

1. *Connection*—A browser (client) opens a connection to a server.
2. *Query*—The client requests a resource controlled by the server.
3. *Processing*—The server receives and processes the request.
4. *Response*—The server sends the requested resource back to the client.
5. *Termination*—The transaction is finished, and the connection is closed unless it is kept open for another request immediately from the client on the other end of the connection.



3. What are the services provided by following URL schemes?

<i>URL scheme</i>	<i>Purpose</i>
http	Web service
mailto	Email service
Callto	Video/audio calling service
https	Secure web service
file	Local file service

4. What is your advice for designing an effective, user-friendly webpage? Write at least five points.

Section C: Debugging questions (10 points)

1. (5 pts) Following code contains three errors. Identify the places by circling where the error is and write down what should be the correct code.

- a. `<!doctype html>`
- b. `<html>`
- c. `<head>`
- d. `<title>A Basic Webpage</title>`
- e. `</head>`
- f. `<body>`
- g. `<section>`
- h. `<h1>Big on Sports</h1>`
- i. `<p>Sports are fun and good for you ...`
- j. `<p> What is your favorite sport? ... And here is a short
list:`
- k. `</p>`
- l. ` Baseball Basketball `
- m. ` Tennis Soccer `

- n.
- o. <section>
- p. </body>
- q. </html>

</p>

</section>

2. (5 pts) Following code contains three errors. Identify the places by circling where the error is and write down what should be the correct code.

- a. <!doctype html>
- b. <html>
- c. <head>
- d. <title>A Basic Webpage</title>
- e. </head>
- f. <body>
- g. <article>
- h. <h1>The Green Earth Project</h1>
- i. <h3>Project Background</h3>
- j. <p>Put first paragraph here</p>
- k. <p>Put second paragraph here
- l. <h4>A Successful Past</h4>
- m. <p>Another paragraph here</p>
- n. </section>
- o. <section>
- p. <h3>Current Status of Green Earth</h3>
- q. <p>Another paragraph here</p>
- r. </section>
- s. <section>
- t. Future Goals</h3>
- u. </section></article>

v. </body>

w. </html>

</p>

<section>

<h3>

3. (5 pts) Following code contains three errors. Identify the places by circling where the error is and write down what should be the correct code.

a. <!DOCTYPE html>

b. <html>

c. <head>

d. <title>Centering Different Elements</title></head>

e. <body style="margin: 50px">

f. <section>

g. <link href="centerstyle.css" type="text/css" title="center"/>

h. <h2>Centering Different Elements</h2>

i. <p>Resize the window and see how each of these elements centers.

j. </p>

k. <h3 class="center">My Title

l. <p class="center">Topic of the Day</p>

m. <p tyle="text-align:center; font-weight:bold">Announcemenet</p>

n. <p class="center">

o.

p. </p>

q. </section>

r. </body>

s. </html>

g. rel

k. </h3>

m. style

CSE102 – Introduction to Web Design and Programming

Midterm-2 Exam- ANSWERKEY

27-November-2019

Total points: 75

Time allotted: 1 hr 15 mins

Section A: Short answer questions on PHP (2 pts each * 9 questions = 18 pts)

26. What is the difference between unary, binary, and ternary operators in PHP?

The difference between unary, binary, and ternary operators is the number of operands each requires (one, two, and three, respectively).

27. Name the three conditional statement types in PHP.

The three conditional statement types are if, switch, and the ?: operator.

28. What command can you use to skip the current iteration of a loop and move on to the next one in PHP?

To skip the current iteration of a loop and move on to the next one, use a continue statement.

29. What is the main benefit of using a function?

Using functions avoids the need to copy or rewrite similar code sections many times over by combining sets of statements so that they can be called by a simple name.

30. How can you incorporate one PHP file within another?

To incorporate one file within another, you can use the include or require directives, or their safer variants, include_once and require_once.

31. How do you create a new object in PHP?

To create a new object in PHP, use the new keyword like this:

```
$object = new Class;
```

What is the difference between a numeric and an associative array?

A numeric array can be indexed numerically using numbers or numeric variables. An associative array uses alphanumeric identifiers to index elements.

32. How can you determine the number of elements in an array?

You can use the count function to count the number of elements in an array.

33. What is the purpose of the explode function?

The purpose of the explode function is to extract sections from a string that are separated by an identifier, such as extracting words separated by spaces within a sentence.

Section B: Short answer questions on JavaScript (1st question: 1 pt, other: 2 pts each * 9 questions = 18 pts)

1. Are JavaScript functions and variable names case-sensitive or case-insensitive? (1 pt)

JavaScript functions and variable name are case-sensitive. The variables Count, count, and COUNT are all different.

2. By default, to which part of a document will JavaScript code output?

By default, JavaScript code will output to the part of the document in which it resides. If it's in the head, it will output to the head; if in the body, it outputs to the body.

3. How can you include JavaScript code from another source in your documents?

You can include JavaScript code from other files in your documents by either copying and pasting them or, more commonly, including them as part of a `<script src='filename.js'>` tag.

4. Which JavaScript function is the equivalent of echo or print in PHP?

The equivalent of the echo and print commands used in PHP is the JavaScript `document.write` function (or method).

5. What characters are used to define a JavaScript variable name?

Unlike PHP, no character is used (such as `$`) to define a JavaScript variable name. JavaScript variable names can start with and contain uppercase and lowercase letters as well as underscores; names can also include digits, but not as the first character.

6. When would you use the `===` (identity) operator?

You use the identity operator when you wish to bypass JavaScript's automatic operand type changing.

7. What is the best way to force your own operator precedence?

The best way to force your own operator precedence is to surround the parts of an expression to be evaluated first with parentheses.

8. What keyword is used to create an object?

New objects are created via the `new` keyword.

9. Name a way to return multiple values from a function.

One way to return multiple values from a function is to place them all inside an array and return the array.

10. What JavaScript method can you use to send a form for validation prior to submitting it?

You can send a form for validation prior to submitting it by adding the Java-Script onsubmit attribute to the <form> tag. Make sure that your function returns true if the form is to be submitted, and false otherwise.

11. Write a regular expression to match either of the words hot or hit.

A regular expression to match either of the words hot or hit could be `/h[oi]t/`.

12. Using regular expressions, write a JavaScript function to test whether the word make exists in the String "Adversity and loss make a man wise".

A JavaScript function using regular expressions to test whether the word fox exists in the string The quick brown fox could be as follows: `document.write(/make/.test("Adversity and loss make a man wise"))`

Section C: Multiple choice questions on PHP. Circle appropriate choice. (1.5 pts each * 12 questions = 18 pts)

1. How to define a function in PHP?

a) `function {function body}`

b) `function functionName(parameters) {function body}`

c) `data type functionName(parameters) {function body}`

d) `functionName(parameters) {function body}`

2. What will be the output of the following PHP code?

```
<?php
function calc($price, $tax="")
{
    $total = $price + ($price * $tax);
    echo "$total";
}
calc(50, 0.2);
?>
```

a) Error

b) 50

c) 60

d) 42

3. What will be the output of the following PHP code?

```
<?php
$op2 = "be";
function foo($op1)
{
    global $op2;
    echo $op2;
    echo $op1;
}
foo(" awesome");
?>
```

- a) Awesome be
- b) be awesome
- c) Beawesome
- d) awesome

4. What will be the output of the following PHP code?

```
<?php
function foo($msg)
{
    echo "$msg";
}
$var1 = "foo";
$var1("This works!!");
?>
```

- a) Error
- b) \$msg
- c) 0
- d) This works!!

5. Which of the following are correct ways of creating an array?

- I. `city[0] = "Seoul";`
- II. `$city[] = array("Seoul");`
- III. `$city[0] = "Seoul";`
- IV. `$city = array("Seoul");`

- a) iii) and iv)
- b) ii) and iii)
- c) Only i)
- d) ii), iii) and iv)

6. What will be the output of the following PHP code?

```
<?php
$country = array("Mauritius" => array
("population" => "1,265,985", "capital" => "Port Luis"),
"Maldiver" => array("population" => "133,412",
"capital" => "Male"));
echo $country["Mauritius"]["population"];
?>
```

- a) Mauritius 1,265,985
- b) 1,265,985
- c) population 1,265,985
- d) Mauritius population

7. What will be the output of the following PHP code?

```
<?php
$state = array ("Karnataka", "Goa", "Tamil Nadu",
"Andhra Pradesh");
echo (array_search ("Goa", $state));
?>
```

- a) True
- b) 2
- c) False
- d) 1

8. What will be the output of the following PHP code?

```
<?php
$cars = array("Audi", "Mercedez", "Opel");
echo "I like " . $cars[1] . ", " . $cars[2] . " and " . $cars[0] . ".";
?>
```

- a) I like Audi, Mercedez and Opel
- b) I like Mercedez, Opel and Audi
- c) I like Opel, Audi and Mercedez
- d) I like Opel, Mercedez and Audi

9. What will be the output of the following PHP code?

```
<?php
$fname = array("Peter", "Ben", "Joe");
$age = array("45", "57", "63");
$c = array_combine($age, $fname);
print_r($c);
```

?>

- a) Array (Peter Ben Joe)
- b) Array ([Peter] => 45 [Ben] => 57 [Joe] => 63)
- c) Array (45 57 63)
- d) Array ([45] => Peter [57] => Ben [63] => Joe)

10. What will be the output of the following PHP code?

```
<?php
$a1 = array("red", "green");
$a2 = array("blue", "yellow");
$a3 = array_merge($a1, $a2);
$a4 = array("0", "1", "2", "3");
$a = array_combine($a4, $a3);
print_r($a);
?>
```

- a) Array ([a] => blue [b] => yellow [c] => red [d] => green)
- b) Array ([0] => blue [1] => yellow [2] => red [3] => green)
- c) Array ([0] => red [1] => green [2] => blue [3] => yellow)
- d) Array ([a] => red [b] => green [c] => blue [d] => yellow)

11. What will be the output of the following PHP code?

```
<?php
$names = array("Aron", "Bob", "Jack");
echo $names[1] . " is the brother of " . $names[2] . " and " .
$names[0] . ".";
?>
```

- a) Bob is the brother of Jack and Aron
- b) Aronis the brother of Bob and Bob
- c) Bob is the brother of Aron and Jack
- d) Jack is the brother of Bob and Aron

12. What will be the output of the following PHP code?

```
<?php
$names = array("Aron", "Bob", "Jack");
echo $names[0]. "is the brother of ".$names[1]. " and
".$names[1]. " ".$brother;
?>
```

- a) Aron is the brother of Bob and Bob) \$brother
- b) Aron is the brother of Bob and Bob)

- c) \$brother
- d) Error

**Section D: Multiple choice questions on JavaScript. Circle appropriate choice.
(1.5 pts each * 12 questions = 18 pts)**

1. What will be the output of the following JavaScript code?

```
<HTML> <body>
<p id="demo"></p>
<script>
var x = 10;
var y = 2;
var z = x / y;
document.getElementById("demo").innerHTML = z;
</script>
</body> </HTML>
```

- a) 0
- b) 1
- c) 2
- d) 5

2. What will be the output of the following JavaScript code?

```
<HTML> <body>
<p id="demo"></p>
<script>
txt1 = "Cheer";
txt1 += "up!";
document.getElementById("demo").innerHTML = txt1;
</script>
</body> </HTML>
```

- a) Cheerup!
- b) Cheer up!
- c) up! Cheer
- d) up!Cheer

3. The statement `x===y` refers to _____

- a) Both x and y are equal in value, type and reference address
- b) Both x and y are equal in value
- c) Both x and y are equal in value and type
- d) There is no such statement

4. What will be the output of the following JavaScript code?

```
function equalto()
{
    var num=10;
    if(num=="20")
        return true;
    else
        return false;
}
console.log(equalto())
```

- a) true
- b) false
- c) runtime error
- d) compilation error

5. What will be the output of the following JavaScript code?

```
function mystery()
{
    var a=1;
    if(a!=null)
        return 1;
    else
        return 0;
}
console.log(mystery())
```

- a) 1
- b) 0
- c) runtime error
- d) compiler error

6. Consider the following JavaScript statements.

```
var sentence = "Life is precious!!"; // Sample text
var pattern = /\d+/g // Matches all instances of one or more digits
```

In order to check if the pattern matches with the string represented by variable `sentence`, the statement is

-
- a) `sentence==pattern`
 - b) `pattern.test(text)`
 - c) `sentence.test(pattern)`
 - d) `pattern.test(sentence)`

7. What kind of expression is “new Rectangle(5,6)”?

- a) Primary Expression
- b) Object Creation Expression
- c) Invocation Expression
- d) Constructor Calling Expression

8. What will be the output of the following JavaScript code?

```
function output(option)
{
  return (option ? "yes" : "no");
}
var ans=false;
console.log(output(ans));
```

- a) yes
- b) no
- c) Runtime error
- d) Compilation error

9. What will be the output of the following JavaScript code?

```
function height()
{
  var height = 155;
  var type = (height < 180) ? "tall" : "short";
  return type;
}
console.log(height())
```

- a) 155
- b) 180
- c) tall
- d) short

10. What will be the output of the following JavaScript code?

```
var grade='B';
var result= "";
switch(grade)
{
  case 'A':
  {
    result+="4";
    break;
  }
  case 'B':
  {
    result+="3";
    break;
  }
}
```

```
    case 'C':
    {
        result+="2";
        break;
    }
    default:
    result+="1";
}
console.log(result);
```

- a) 4
- b) 3
- c) 2
- d) 1

11. What will be the output of the following JavaScript code?

```
var a=10;
var b=8;
var c=6;
if(a==b)
    console.log(a);
else if(a==c)
    console.log(a);
else
    console.log(c);
```

- a) 10
- b) 6
- c) Error
- d) 8

12. What will be the output of the following JavaScript code?

```
var grade='A';
var result=0;
switch(grade)
{
    case 'A':
        result+=4;
    case 'B':
        result+=3;
    case 'C':
        result+=2;
    default:
        result+=1;
}
console.log(result);
```

- a) 10
- b) 27
- c) 8
- d) 0

CSE102 – Introduction to Web Design and Programming

Endterm Exam

Section A: HTML code writing and output. For the code writing questions, kindly write the code that will execute properly in the browser. The code should include all necessary elements such as HTML, HEAD and BODY.

34. Write the HTML code that produces following output:

(5 pts)

Heading 2: Commonly available fresh vegetable and fruits

- Some fruits:
 - Banana
 - Apple
 - Mango
 - kiwi
- Some vegetables:
 - Onion
 - Leak
 - Carrot
 - Cucumber

```
<html>
<head>
<title> HTML lists
</title>
</head>
<body>
<h2>Heading 2: Commonly available fresh vegetable and fruits</h2>
<ul>
<li> Some fruits:
  <ul>
    <li> Banana
    <li> Apple
    <li> Mango
    <li> kiwi
  </ul>
<li> Some vegetables:
  <ul>
    <li> Onion
    <li> Leak
    <li> Carrot
    <li> Cucumber
  </ul>
</ul>
</body>
</html>
```


36. Given that the image file is stored in the folder "image/elephant.jpg", write the HTML code that produces following output. note that "An elephant at sunset" written below the figure is a figure caption. (5 pts)

Elephant at the sunset

Elephants are mammals of the family Elephantidae and the largest existing land animals. Three species are currently recognised: the African bush elephant, the African forest elephant, and the Asian elephant.



An elephant at sunset

```
<html>
  <head>
    <title>Majestic elephants</title>
  </head>
  <body>

  <h2>Elephant at the sunset</h2>

  <p>Elephants are mammals of the family Elephantidae and the largest
  existing land animals. Three species are currently recognised: the African
  bush elephant, the African forest elephant, and the Asian elephant.</p>

  <figure>
    
    <figcaption>An elephant at sunset</figcaption>
  </figure>
</body>
</html>
```

37. Given the following HTML/CSS code, how does the output would look like in a browser? (5 pts)

```
<html>
<head>
<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
th, td {
  padding: 5px;
  text-align: left;
}
</style>
</head>
<body>
<h2>Famous spiritual singers</h2>
<p>Celebrate divinity with the following singers and music albums.</p>
<table style="width:100%">
  <tr>
    <th>Name</th>
    <th colspan="2">Albums</th>
  </tr>
  <tr>
    <td>Peter Kater</td>
    <td>Heart of the universe</td>
    <td>Divine soul</td>
  </tr>
  <tr>
    <td>Snatam Kaur</td>
    <td>Anand bliss</td>
    <td>Celebrate peace</td>
  </tr>
</table>
</body>
</html>
```

Famous spiritual singers

Celebrate divinity with the following singers and music albums.

Name	Albums	
Peter Kater	Heart of the universe	Divine soul
Snatam Kaur	Anand bliss	Celebrate peace

38. Given the following HTML/CSS code, how does the output will look like in a browser? (5 pts)

```
<html>
<head>
<title>A Basic Webpage</title>
</head>
<body>
<section>
<h1>Big on Sports</h1>
<p>Sports are fun and good for you ...</p>
<p> What is your favorite sport? ... And here is a short list: </p>
<ol>
<li> Baseball </li> <li> Basketball </li>
<li> Tennis </li> <li> Soccer </li>
</ol>
</section>
</body>
</html>
```


Big on Sports

Sports are fun and good for you ...

What is your favorite sport? ... And here is a short list:

1. Baseball
2. Basketball
3. Tennis
4. Soccer

Section B: Short answer questions on networking and HTML.

1. What does an IP address represent? Give two examples of valid IPv4 addresses.

(3 pts)

On the Internet, each host has a unique IP address For example, tiger, a host at Kent State, has the IP address 131.123.38.172.

[0-255].[0-255].[0-255].[0-255]

[0-255].[0-255].[0-255].[0-255]

2. What is the purpose of Domain Name System (DNS)? Explain briefly the concept of Domain Name Hierarchy.

(3 pts)

The IP address is easy on machines but hard on users.

Therefore, each host also has a unique domain-based name composed of words, rather like a postal address. For example, the domain name for tiger is tiger.cs.kent.edu (at Department of Computer Science, Kent State University).

3. What is the long form of URL? Explain the purpose of URL in brief.

(3 pts)

The Web uses Uniform Resource Locators (URLs) to identify (locate) many kinds of resources (files and services) available on the Internet.

A URL may identify a host, a server port, and the target file stored on that host. URLs are used, for example, by browsers to retrieve information, and in HTML documents to link to other resources.

4. What is the difference between static and dynamic web pages? Why are dynamic web pages used? (3 pts)

A Web server can also deliver dynamic pages that are generated on-the-fly by programming on the server side.

A dynamic page is produced when a request arrives often with input data.

Customizing a document depending on when, from where, by whom, and with what program it is retrieved.

5. What is the purpose of web publishing and hosting? What are the services provide by a web hosting service? (3 pts)

Publishing on the Web involves Designing and constructing the pages and writing the programs for a website. Placing the completed site with a hosting service which runs web server programs to deliver your site to Web users. To host a site under a given domain name, a hosting service associates that domain name to an IP number assigned to the hosted site.

Section C: HTML multiple choice questions. Circle the correct choice. (1 pt each. 1 * 15 -> 15 pts). (15 pts)

1. What is the default type of 'type' attribute of <input> element in a HTML form?

- a) Text
- b) Password
- c) Numerals
- d) Special Characters

2. Which attribute defines the file-select field in a HTML form?

- a) file
- b) checkbox
- c) button
- d) text

3. Which element is used to create multi-line text input in a HTML form?

- a) text
- b) **textarea**
- c) submit
- d) radio button

4. Which attribute is not used for the radio type in a HTML form?

- a) name
- b) value
- c) checked
- d) **selected**

5. Which of the following is not the form type for adding text?

- a) Text input
- b) Text area
- c) Password input
- d) Submit button

6. HTML Form validation traditionally was performed by _____.

- a) PHP
- b) HTML
- c) **JavaScript**
- d) jQuery

7. For grouping form controls we can use _____.

- a) <legend>
- b) **<fieldset>**
- c) <label>
- d) <select>

8. Which of the following HTML tag defines the title of a work? (e.g. a book, a song, a movie, a TV show etc.)

- a) <cite>
- b) <hr>
- c) <a>
- d) <address>

9. Which attribute specifies a unique alphanumeric identifier to be associated with a HTML element?

- a) class
- b) id
- c) article
- d) html

10. The _____ attribute specifies an inline style associated with an element, which determines the rendering of the affected element.

- a) dir
- b) style
- c) class
- d) article

11. Which HTML element defines preformatted text?

- a) <p>
- b) <pre>
- c) <hr>
- d) <ins>

12. Which element is used for creating links in a HTML page?

- a) <a>
- b) <p>
- c)
- d)

13. What is the path for an image located in same folder as the current page?

- a) ``
- b) ``
- c) ``
- d) ``

14. Which of the following can't be the value of list-style-type?

- a) square
- b) circle
- c) ellipse
- d) disc

15. Relative URLs are used to _____

- a) link other pages within the same site
- b) link the same page with other sites
- c) link other pages with other sites
- d) does not link

Section D: CSS multiple choice questions. Circle the correct choice. (1 pt each. 1 * 15 -> 15 pts). (15 pts)

1. Which of the following CSS selector types are used to specify elements to bind CSS style rules?

- a) id
- b) class
- c) tag
- d) all of the mentioned

2. Which CSS selector is used to specify a rule to bind a particular unique element?

- a) id
- b) class
- c) tag

d) both class and tag

3. Which of the following CSS functions defines a linear gradient as a CSS image?

a) grayscale()

b) gradient()

c) image()

d) linear-gradient()

4. Which of the following CSS property is used to give a line under the text?

a) text-decoration: underline

b) text-decoration: overline

c) text-decoration: line-through

d) text-decoration: none

5. For Inline style, we don't need to reapply style information throughout the document and outside documents.

a) True

b) False

6. Inline style has the lowest priority.

a) True

b) False

7. Inside which of the following HTML tag we provide information about linking external CSS style sheets?

a) <head>

b) <html>

c) <div>

d) <body>

8. The _____ directive allows CSS style sheets to be grouped and joined together.

- a) <head>
- b) <style>
- c) <script>
- d) @import

9. Which of the following measurement defines a measurement relative to a font's x-height?

- a) ex
- b) em
- c) pt
- d) px

10. Which of the following measurement defines measurement of font size as a percentage?

- a) %
- b) cm
- c) em
- d) in

11. Which of the following CSS property sets the font size of text?

- a) text-size
- b) font-size
- c) size
- d) text

12. Which of the following property sets the amount of spacing between letters?

- a) space
- b) line-height
- c) letter-spacing
- d) letter-space

13. Which of the following Color Format is a CSS's six-digit hexadecimal format is the same as color defined in HTML?

- a) 6-Hex Color
- b) 3-Hex Color
- c) RGBS
- d) RGBa

14. Which of the following color has this value #ff0000?

- a) blue
- b) green
- c) red
- d) yellow

15. Select the CSS property that sets the width of an element's bottom border?

- a) border-width
- b) border-bottom
- c) border-width-down
- d) border-bottom-width

Section E: PHP multiple choice questions. Circle the correct choice. (1.5 pt each. 1.5 * 10 -> 15 pts). (15 pts)

1. What will be the output of the following PHP code?

```
<?php
$foo = 'Korea';
$bar = $foo;
$bar = "I live in $bar";
echo $bar;
echo $foo;
?>
```

- a) Error
- b) I live in KoreaKorea
- c) I live in Korea
- d) I live in Korea Korea

2. Which of the following PHP statements will output Hello World on the screen?

```
i) echo ("Hello World");  
ii) print ("Hello World");  
iii) printf ("Hello World");  
iv) sprintf ("Hello World");
```

- a) i) and ii)
- b) i), ii) and iii)
- c) i), ii), iii) and iv)
- d) i), ii) and iv)

3. What will be the output of the following PHP code?

```
<?php  
$color = "violet";  
$var = $color[3];  
echo "$var";  
?>
```

- a) o
- b) Error
- c) \$var
- d) l

3. What will be the output of the following PHP code?

```
<?php  
$total = "35 birds";  
$more = 10;  
$total = $total + $more;  
echo "$total";  
?>
```

- a) Error
- b) 45 birds
- c) 45
- d) 35 birds

4. What will be the output of the following PHP code?

```
<?php
function track() {
    static $count = 1;
    $count++;
    echo $count;
}
track();
track();
track();
?>
```

a) 234

b) 111

c) 222

d) 011

5. What will be the output of the following PHP code?

```
<?php
$a = "stony";
$a .= "brook";
echo "$a";
?>
```

a) stony

b) brook

c) error

d) stonybrook

6. Which of the conditional statements is/are supported by PHP?

i. if statements

ii. if-else statements

iii. if-elseif statements

iv. switch statements

a) Only i

b) i, ii and iv

c) ii, iii and iv

d) i, ii, iii and iv

7. What will be the output of the following PHP code?

```
<?php
$steam = "arsenal";
switch ($steam) {
case "manu":
    echo "I love manu";
case "arsenal":
    echo "I love arsenal";
case "manc":
    echo "I love manc"; }
?>
```

- a) I love arsenal
- b) Error
- c) I love arsenalI love manc**
- d) I love arsenalI love mancI love manu

8. What will be the output of the following PHP code?

```
<?php
$user = array("East", "West", "South", "North");
for ($x=0; $x < count($user); $x++) {
    if ($user[$x] == "West") continue;
    printf ($user[$x]);
}
?>
```

- a) EastWest
- b) EastSouthNorth**
- c) SouthNorthEast
- d) West

9. What will be the value of \$a and \$b after the function call in the following PHP code?

```
<?php
function doSomething( &$arg ) {
    $return = $arg;
    $arg += 1;
    return $return;
}
$a = 3;
$b = doSomething( $a );
echo $a, $b;
?>
```

- a) 34
- b) 43**

- c) 33
- d) 44

10. What will be the output of the following PHP code?

```
<?php
function calc($price, $tax="")
{
    $total = $price + ($price * $tax);
    echo "$total";
}
calc(42);
?>
```

- a) Error
- b) 0
- c) 42
- d) 84

Section F: JavaScript and regular expression multiple choice questions. Circle the correct choice. (1.5 pt each. 1.5 * 10 -> 15 pts). (15 pts)

1. What will be the output of the following JavaScript code?

```
function output(object)
{
    var place=object ? object.place : "Italy";
    return "clean:"+ place;
}
console.log(output({place:"Korea"}));
```

- a) clean:Korea
- b) clean:Italy
- c) error

d) undefined

2. What will be the output of the following JavaScript code?

```
<p id="demo"></p>
<script>
function myFunction()
{
    document.getElementById("demo").innerHTML = Math.abs(-7.25);
}
</script>
```

a) 7.25

b) -7.25

c) 7

d) -7

3. What will be the output of the following JavaScript code?

```
var count = 0;
while (count < 10)
{
    console.log(count);
    count++;
}
```

a) The values of count are logged or stored in a particular location or storage

b) The value of count from 0 to 9 is displayed in the console

c) An error is displayed

d) An exception is thrown

4. What will be the output of the following JavaScript code?

```
<p id="demo"></p>
<script>
document.getElementById("demo").innerHTML = typeof "John"
</script>
```

a) integer

b) number

c) string

d) error

5. What will be the output of the following JavaScript code?

```
var obj=  
{  
  length:20,  
  height:35,  
}  
if ('breadth' in obj === false)  
{  
  obj.breadth = 12;  
}  
  
console.log(obj.breadth);
```

- a) 20
- b) 12**
- c) undefined
- d) error

6. What will be the output of the following JavaScript code?

```
var string1 = "123";  
var intvalue = 123;  
console.log( string1 + intvalue );
```

- a) 123246
- b) 246
- c) 123123**
- d) Exception

Use the following table as a reference for regular expressions:

Operator	Means	Character Class	Matches
*	0 or more occurrences	[]	Indicates a generic character class
+	1 or more occurrences	\d	Any single digit (0–9)
?	0 or 1 occurrence	\D	Any single non-digit character
{ <i>n</i> }	Exactly <i>n</i> occurrences	\w	A single alphanumeric character (a–z, A–Z, 0–9, or an underscore)
{ <i>m</i> , <i>n</i> }	At least <i>m</i> and no more than <i>n</i> occurrences	\W	A single non-alphanumeric character
{ <i>m</i> , }	At least <i>m</i> occurrences	\s	Any single whitespace character (space, tab, or newline)
()	Marks a group or sub-pattern	\S	A single non-whitespace character
	Indicates alternation (OR)		

7. What will be the output of the following JavaScript code?

```
function myFunction() {  
  var str = "100, 1000 or 10000?";  
  var patt1 = /\d{3,4}/g;  
  var result = str.match(patt1);  
  console.log(result);  
}  
myFunction();
```

- a) ["100","1000"]
- b) ["100","1000","1000"]
- c) ["100","100","100"]
- d) ["1000","1000","1000"]

8. What will be the output of the following JavaScript code?

```
function myFunction() {  
  var str = "Is this all there is?";  
  var patt1 = /^[^ht\s]*/g;  
  var result = str.match(patt1);  
  console.log(result);  
}  
myFunction();
```

- a) I,s,t,h,i,s,a
- b) Is this all there is?
- c) False
- d) I,a,l,l,e,r,e,?

9. The following is a regular expression.

```
'\d\d-\d\d-\d\d \d\d:\d\d:\d\d.\d\d'
```

What will the pattern match from the following text?

- a) 18-08-26-08.00.00.01
- b) 18-09-26.23:59:59.99
- c) 18-09-23 08:00:00.00
- d) 18-12-12-18:30:00.99

10. Given the following words, which words match the regular expression 'ab*cd*'?

- 1. abbc
- 2. bcadcbab
- 3. abcd
- 4. acdd
- 5. abcdd

- a) 2,4,5
- b) 1,3,5
- c) 1,3,4,5
- d) None of the above