

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. Which organization 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. (Choose True/False). You can use the same CSS styling class on multiple HTML elements.
- a) True
 - b) False
8. Which is the correct CSS syntax for black color of text in body?
- 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 syntax for inserting an image?
- a) ``
 - b) `<image src="image.gif" alt="MyImage">`
 - c) ``
 - d) ``
11. How can you make a HTML 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 HTML 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 CSS 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. Explain in detail the process of HTTP transactions.

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

<i>URL scheme</i>	<i>Purpose</i>
http	
mailto	
Callto	
https	
file	

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>`

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>`

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 style="text-align:center; font-
weight:bold">Announcemenet</p>`
- n. `<p class="center">`
- o. ``
- p. `</p>`
- q. `</section>`
- r. `</body>`
- s. `</html>`

CSE102 – Introduction to Web Design and Programming

Midterm-2 Exam

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?

27. Name the three conditional statement types in PHP.

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

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

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

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

32. What is the difference between a numeric and an associative array in PHP?

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

34. What is the purpose of the explode function?

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

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

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

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

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

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

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

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

8. What keyword is used to create an object in JavaScript?

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

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

11. Write a JavaScript regular expression to match either of the words `hot` or `hat`.

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`.

Section C: Multiple choice questions on PHP. Circle appropriate choice. (1.5 pts each * 12 = 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"),
"Maldiv" => 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
$scars = array("Audi", "Mercedez", "Opel");
echo "I like ".$scars[1].", ".$scars[2]." and ".$scars[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 * 12 = 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

38. 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>
```

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)

2. What is the purpose of Domain Name System (DNS)? Explain briefly the concept of Domain Name Hierarchy. (3 pts)

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

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 HTML Form type for adding text?

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

6. HTML Form validation traditionally is performed by _____.

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

7. For grouping HTML 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 CSS Inline style, we don't need to reapply style information throughout the document and outside documents.

- a) True
- b) False

6. CSS 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) 0
- b) Error
- c) \$var
- d) 1

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
$team = "arsenal";
switch ($team) {
    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) 3 4
- b) 4 3
- c) 3 3
- d) 4 4

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 regular expression reference sheet table provided on the last page as a reference for solving regular expressions problems:

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]is/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) l,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

Regular Expressions Reference Sheet

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)		