

**CIS 111 Final Exam
Summer 2019.**

**32 questions- 5 points each & 2 bonus questions- 20 points each.
Total points: 200**

Full Name.....

UO ID.....

1. When $x = 5$ and $y = 10$, what will be the value of the following statements?

- a) $x \geq y$
- b) $x > y \ \&\& \ x == y$
- c) $x > y \ || \ x == y$
- d) $x \leq y$
- e) $!(x > y \ || \ x \geq y)$

2. What value does the following code print on the console?

```
let total = 0;
for (let i = 0; i <= 12; i+=4)
    total = total + i;
console.log(total);
```

3. Suppose a web page has two input elements, and the content in the second input element is, *Avast!* After this code is executed, what will the content in the first input element be?

```
let content = document.querySelectorAll("input")[1].value;
content = `${content} Ya lubber! `;
document.querySelectorAll("input")[0].value = content;
```

4. In the following code what will be the output?

```
function addStuff(arr){
    let result = 0;
    for(let i = 0; i < arr.length; ++i){
        if(arr[i] > 0)
            result += arr[i];
    }
    return result;
}
let x = 6;
let numbers = [2, 4, x, 8];
console.log(addStuff(numbers));
```

5. What is printed on the console?

```
let n = 1, result = 1;
while (n < 3) {
    result = Math.pow(n, 2);
    ++n;
}
console.log(result);
```

6. What is printed on the console?

```
let isPhredGoing = false, islantheGoing = true;
let isRokyGoing;
if (!isPhredGoing && islantheGoing)
    isRokyGoing = true;
else
    isRokyGoing = false;
console.log(isRokyGoing);
```

7. What character does the following code print on the console.

```
let str = "makter2@cs.uoregon.edu ";
let i = str.length - 1;
console.log(str[i]);
```

8. What does the following code print on the console?

```
let names = ["Robert", "Diane", "Dennis", "Kaylene"];
console.log(names[names.length-2]);
```

9. What does the following code print on the console?

```
let odds = [1, 3, 5, 7];
total = 0;
for (let i = 0; i < odds.length; i++)
  total = total + odds[i];
console.log(total);
```

10. What does the following code print on the console?

```
let company = "Intel";
function addStuff(arr){
  let result = 0;
  for(let i = 0; i < arr.length; ++i){
    if(arr[i] > 0)
      result += arr[i];
  }
  return result;
}
```

11. This example prints what value on the console?

```
let s = "The life of a repo man is always intense";
let arr = s.split(' ');
console.log(arr[1].length);
```

12. What does the following print on the console?

```
let numbers = [2, 4, 6, 8];
console.log(numbers[1]-1);
```

13.What does the following print on the console?

```
let isVowel = (ch) => {  
  let vowels = /[aeiouyAEIOUY]/;  
  return vowels.test(ch);  
};  
  
console.log(isVowel("Ya3"));
```

14.What does the following print on the console?

```
let goats = 7, cows = 10, sheep = 3;  
if (sheep < goats && cows > sheep)  
  console.log("Buy more sheep");  
else if (goats < sheep && cows > goats)  
  console.log("Buy more goats");  
else if (cows < sheep || cows < goats)  
  console.log("Buy more cows");  
else  
  console.log("Save your money");
```

15.What type of data, the variable words is holding in the following code?

```
let getWords = sentence => {  
  return sentence.split(" ");  
};  
let words = (getWords("The quick brown fox"));
```

16.After execution of the following statements, what will be b's latest value.

```
let a = 20, b = 10;  
a++;  
b = a + b++;
```

17.The following code prints what value in the console?

```
let prof = ["Severus", "Snape", ["potions", "dark arts"]];  
let majors=prof[2];  
console.log(prof[0].charAt(0) + " . " + majors[0]);
```

18.The following code prints what value on the console?

```
let pattern = /[aeiou]/;  
console.log(pattern.test("A"));
```

19.The following prints what value on the console?

```
let faves = "Donuts,Milk,Eggs,Spam";  
let foods = faves.split(",");  
console.log(foods[2] + ", " + foods[3] + ", " + foods[1] + ", and " + foods[3]);
```

20.What does the following print on the console?

```
let addStuff = function(arr){  
  let result = 0;  
  for(let i = 0; i < arr.length; ++i){  
    if(arr[i] > 0)  
      result += arr[i];  
  }  
  return result;  
}  
  
console.log(addStuff([2, -4, 3, 5, 0, -1]));
```

21.what value this function prints?

```
let WTH = (s) => {  
  let k = 0;  
  for (let i = 0; i < s.length; ++i)  
    if(/[aeiouy]/i.test(s[i]) == true)  
      ++k;  
  return k;  
}  
console.log(WTH("7Squids"));
```

22. What does the following print on the console?

```
let daysInMonth = month => {  
  let months = [31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31];  
  return months[month - 1];  
};  
  
console.log(daysInMonth(2)-1);
```

23. What does the following print on the console?

```
let numbers = [2, 4, 6, 8, 10, 12, 14, 13, 45, 21, 91, 67, 4];  
value = numbers[numbers[numbers[1]-1]];  
console.log(value);
```

24. The following function has at least one syntax error. What is that?

```
function func(n){  
  if(n % 2 == 0)  
    console.log("true");  
    return true;  
  else  
    return false;  
}
```

25. The following prints what value on console?

```
let j = 2, k = 3, temp;  
temp = j;  
j = k;  
k = temp;  
console.log(`j = ${j} k = ${k}`);
```

26. What the alerts will display?

```
let promptForName = "Enter your name";  
alert(promptForName);  
alert("Enter your name");
```

27. Given this HTML element: `<p>Bilbo Baggins</p>`. This following statement prints what value?

```
console.log(document.querySelector("p").innerHTML);
```

28. This example prints what value?

```
let search = (s, ch) => {  
  if(s.indexOf(ch) == -1)  
    return "Miss!";  
  else  
    return "Hit!"  
};  
console.log(search("Echo", "E"));
```

29. Convert this for loop in while loop.

```
let j = 0, ans = "";  
while( j <= 3 ){  
  ans = ans + j + " ";  
  j++;  
};  
console.log(ans);
```


30. Complete the fill in the blank below to print 0 1 2 3 4 on the console.

```
let result = "";  
for (let j = 0; _____; j++) {  
    result = result + j + " ";  
}  
console.log(result);
```

31. The following example prints what?

```
let txt1 = "Argus";  
let txt2 = "Filch";  
let txt3 = `${txt1} ${txt2}`;  
console.log(txt3);
```

32. How to write a condition that recognizes an alphabetic letter in JavaScript, write an example code?

33. Write an arrow syntax function called maxDigit that takes a long number as parameter and returns the maximum digit in that number. (Bonus 20 points)

Example if the number is n=4621375858457;

The output should be 8.

34. Write a function expression called `maxWord` that takes a sentence as parameter and returns the word of the maximum length in that string. (Bonus 20 points)
Example if the sentence is `str='The white albatross flies over the clever fox'`;
The output should be `'albatross'`.