1. Determine what this Javascript code will print out (without running it):

x = 1;

var a = 5;

var b = 10;

var c = function(a, b, c) {

var x = 10;

document.write(x); //1

document.write(a);//2

var f = function(a, b, c) {

b = a;

document.write(b);//3

b = c;

var x = 5;

}

f(a,b,c);

document.write(b); //4

}

c(8,9,10);

document.write(b); //5

document.write(x);//6

**Answer**:

It will print:

10

8

8

9

10

1

2. What is the difference between a method and function?

The method is belonged to a specific object and the function is a Javascript function in the global object, window object.

3. What does 'this' refer to when used in a Java method?

‘this’ is referred to the current Java object

4. What does 'this' refer to when used in a JavaScript method?

‘this’ is referred to the current object which contains the call to ‘this’

5. What does 'this' refer to when used in a JavaScript constructor function?

It is pointed to the current object which has just created.

6. Assume object x is the prototype for object y in Javascript. Object x has a method f( ) containing keyword 'this'. When f is called by x.f( ), what does 'this' refer to?

It refers to the object x

7. What is a free variable in JavaScript?

It is not a local variable in a function as well as not a parameter, it is a variable outside a function and the function can refer to it as a free variable.

8. Create an object that has properties with name = "fred" and major="music" and a property that is a function that takes 2 numbers and returns the smallest of the two, or the square of the two if they are equal.

var eight = {

var name = “fred”;

var major = “music”;

var smallest:function(n1, n2){

if(n1 == n2){

return n1\*n2;

}

else{

if(n1 > n2) return n2;

else return n1;

}

}

}

var info = Object.create(eight);

9. Write Javascript code for creating three Employee objects using the "new" keyword and a constructor function. Employee objects have the following fields: name, salary, position.

function employee (name, salary, position) {

this.name = name;

this.salary = salary;

this.position = position;

}

var e1 = new employee(“Fred”, 500, “dev”);

var e2 = new employee(“Micheal”, 800, “lead”);

var e3 = new employee(“Peter”, 1000, “manager”);

10. Write a Javascript function that takes any number of input arguments and returns the product of the arguments.

function buildList(){

var product = 1;

for(let i=0; i < arguments.length; i++){

product \*= arguments[i];

}

return product;

}

11. Write an arrow function that returns the maximum of its three input arguments.

var max = (n1, n2, n3) => (

if(n1 > n2){

if(n2 > n3) return n2;

else return n3;

}

else{

if(n2 > n3) return n2;

else return n3;

}

);