JavaScript Scope Exercise.

```
c(8,910) will print out 10889.
document.write(b) will print out 10.
Document.write(x) will print out 1.
```

$\mathbf{Q2}$

JavaScript methods are actions that can be performed on objects. A JavaScript method is a property containing a function definition. Methods are functions stored as object properties.

In JavaScript every function is an object. An object is a collection of key:value pairs. If a value is a primitive (integer, string, boolean), or another object, the value is considered a property. If a value is a function, it is called a 'method'.

Within the scope of an object, a function is referred to as a method of that object. It is invoked from the object namespace 'MyObj.theMethod()'. Since we said a function is an object, a function within a function is considered a method of that function.

Q3

This keyword in java can be used inside the Method or constructor of Class. It(this) works as a reference to the current Object whose Method or constructor is being invoked. This keyword can be used to refer to any member of the current object from within an instance Method or a constructor.

Q4

This keyword in JavaScript method refers the object that own the method.

Example

```
var person = {
  firstName : "John",
  lastName : "Doe",
  id : 5566,
  myFunction : function() {
    return this;
  }
};
```

In the example this refers the Person object.

In a constructor function this does not have a value. It is a substitute for the new object. The value of this will become the new object when a new object is created.

Q6

This refers to the prototype x.

Q7

A free variable in JavaScript is: a variable referred to by a function that is not one of its parameters or local variables.

Q8

```
function person(Fikir,music){
      this.Name=Fikir;
      this.Major=music;
      this.smallest=function(x,y){
         if(x < y){
           return x;
         else if(y < x)
            return y;
         }else{
           return x*x +" and "+ y*y;
         }
       }
   var person1=new person("Fikir","music");
   console.log("Name is :" + person1.Name );
   console.log("Smallest Number is :"+person1.smallest(5,9));
   console.log("The square out put is:"+person1.smallest(9,9));
```

Q9

function Employee(name,salary,position){

```
this.Salary=salary;
this.Position=position;
}

Employee.prototype.information= function(){
    return this.firstName+", "+this.Salary+", "+ this.Position;
}

var employee1=new Employee("Fikir",6000,"Developer");
var employee2=new Employee("Mar",7000,"Manager");
var employee3=new Employee("Emnet",2600, "Secretary");

console.log("Employee 1: "+employee1.information());
console.log("Employee 3: "+employee3.information());
```