

Open book, open Internet. You may use your own computer.

T/F Multiple choice Short Answer

1. An XMLHttpRequest object is located on the client side

TRUE FALSE

2. What does the XMLHttpRequest object's send() method actually do?

Short answer: _____

3. Php typically runs on the server side.

TRUE FALSE

4. When php is using a database, that database is on the server side.

TRUE FALSE

5. AJAX is can be used to update a portion of a displayed web page.

TRUE FALSE

6. An index is used to reduce access time to data in a database table.

TRUE FALSE

7. What is a database JOIN operation? Choose best answer.

- a. It is a way of combining the data from two tables.
- b. It is a way of filtering data from a database so that only the desired data are returned.
- c. It is a way of renaming or aliasing a table.

8. What does the php echo () function do?

Short answer: _____

General problems

9. Identify two syntax problems with this code fragment and fix them.

```
var xhttp = XMLHttpRequest();  
  
xhttp.onreadystatechange = function() {  
    };  
  
xhttp.open("GET", "ajax_info.txt", true);  
  
xhttp.send();
```

10. Change this code to turn the div id="demo" element red (either background or text color).

```
<!DOCTYPE html>
<html>
<body>

<div id="demo">
<h1>The XMLHttpRequest Object</h1>
<button type="button" onclick="loadDoc()">Change Content</button>
</div>

<script>
function loadDoc() {
  var xhttp = new XMLHttpRequest();
  xhttp.onreadystatechange = function() {
    if (this.readyState == 4 && this.status == 200) {
      document.getElementById("demo").innerHTML =
        this.responseText;
    }
  };
  xhttp.open("GET", "ajax_info.txt", true);
  xhttp.send();
}
</script>

</body>
</html>
```

11. Change this code to turn write “file not found” in the `div (id="demo")` if the server returns a 404 HTTP message (any other returned HTTP message will not cause a change in the displayed page).

```
<!DOCTYPE html>
<html>
<body>

<div id="demo">
<h1>The XMLHttpRequest Object</h1>
<button type="button" onclick="loadDoc()">Change Content</button>
</div>

<script>
function loadDoc() {
  var xhttp = new XMLHttpRequest();
  xhttp.onreadystatechange = function() {
    if (this.readyState == 4 && this.status == 200) {
      document.getElementById("demo").innerHTML =
        this.responseText;
    }
  };
  xhttp.open("GET", "ajax_info.txt", true);
  xhttp.send();
}
</script>

</body>
</html>
```

12. Consider the following php fragment:

```
$servername = "db2.emich.edu";  
$db_username = "aUser";           //My Username for MySQL  
$db_password = "abcxyz";         //My Password for MySQL  
$db_name     = "DreamHouse";     //My Database Name  
  
// Create connection  
$conn = new mysqli($servername, $db_username, $db_password, $db_name);
```

12.a. Suppose this fragment is located on server <http://someServer.net>.

Will this fragment work?

Why or why not?

12.b. Suppose this fragment is located on server <http://db2.emich.edu>

Will this fragment work?

Why or why not?

13. Consider the following php fragment:

```
$servername = "localhost";  
$db_username = "aUser"; //My Username for MySQL  
$db_password = "abcxyz"; //My Password for MySQL  
$db_name = "DreamHouse"; //My Database Name  
  
// Create connection  
$conn = new mysqli($servername, $db_username, $db_password, $db_name);
```

13.a. What (where) is localhost?

13.b. The constructor `mysqli()` creates a connection to the already existing database "DreamHouse".

Is it possible to create a new database on localhost using php?

YES NO

13.c. If you answered YES, then how would one do that?

If you answered NO, then why not?

14. Give an example of php code where there is a variable `$x` with global scope and a different variable `$x` with local scope. The function does not have to do anything useful.

15. Consider this database schema:

Table Owner has fields

ID: integer, primary key, autoincrement
name: varchar(30)

Table Pet has fields

pID: integer, primary key, auto increment
pName: varchar(30)
oId: integer, a foreign key referencing Owner.ID

Give the SQL (not using php) to do the following:

16.a. Create table Pet

16.b. Insert records to Pet:

1, "Fido", 2
2, "Spot", 4

16.c. Return all pet names (Pet.pName) in the database.

16.d. Return names of pets owned by Owner.name = "Amy".

16.e. Return names of owners who have a pet with the same name (as the owner's name).