1. The PHP concatenation character, i.e., the character used to join strings into a single string, is:
   a.) +        b.) &        c.) ^        d.) ~        e.) –        f.) :        g.) >
2. The statement $var1 = 5; declares the variable $var1 as:
   a.) a boolean       b.) a float       c.) an integer       d.) a string       e.) code doesn't force a declaration
3. If the variable $var2 is declared as a float, then later, the statement $var2 = false; is executed, which of the following happens?
   a.) The type of $var2 remains unchanged and the value is changed to 1.
   b.) The type of $var2 remains unchanged and the value is changed to 0.
   c.) The type of $var2 is changed to boolean and the value false is assigned to it.
   d.) The type and stored value of $var2 remain unchanged, i.e., the statement has not effect.
4. Assume a decimal value is type cast to an integer variable $i using the PHP expression $intval = (int)48.95; What does $intval contain after this expression executes?
   a.) null       b.) 0       c.) 48       d.) 49       e.) None of the above
5. In the foreach loop shown below, circle the variable, $a, $b, or $c that represents the index of the array element when accessed within the loop and underline the variable that represents the array.
   
   ```foreach ($a as $b => $c) { ...loop code... };```
6. In the space below, convert/rewrite the following JavaScript code to PHP.
   
   ```
   if (value >= 0)
       document.write ("The value equals " + value + ".\n");
   
   if ($value >= 0)
       print "The value equals ".$value.".\n";
   ```
7. The PHP keyword "static" is used to:
   a.) make the PHP code of your scripts visible to the client like JavaScript.
   b.) declare global variables visible to all other functions.
   c.) declare a special data type used for random numbers.
   d.) declare a variable that remains declared for the duration, but is visible only within its function.
   e.) create an array of fixed length.
8. True/False: In PHP it is legal to declare an array of mixed types, e.g., $a = array(false, 9.8, "boy", 5);

   Use the following array declaration for the next three problems.
   
   ```
   $links = array('etsu'=>'http://www.etsu.edu',
   3=>'http://www.yahoo.com',
   'what'=>'http://www.whatis.com');
   ```
9. Fix the code below to ensure that it will not print "Array element 3 is Array[3]" and instead print "Array element 3 is http://www.yahoo.com"

   ```
   print "Array element 3 is { $links[3] }";
   OR
   print "Array element 3 is ". $links[3];
   ```
10. Assume an additional element were added to the array $links with the code
   $links[]='http://www.google.com'; After which element would it be included in the array?
   a.) 'etsu'  b.) 3  c.) 'what'  d.) Can't be predicted

11. Assume an additional element were added to the array $links with the code
    $links[]='http://www.google.com'; What would the index of this new element be?
    a.) 0  b.) 1  c.) 4  d.) Can't be predicted

Use the following code as a reference for problems 12 through 16. The numbers along the left side are line numbers and are included only as a reference. They are not part of the code.

```php
<?php
$conn = mysql_connect("localhost", "zxyx999", "12345");
mysql_select_db("zxyx999", $conn);
$result = mysql_query("SELECT * FROM timetable ORDER BY COURSE", $conn);
$count=0;
while($record = mysql_fetch_array($result, MYSQL_ASSOC)) {
    print "<p>Record \$count\n<ul>
    foreach($record as $index => $field_value) {
    print "<li>$index is set to $field_value</li>
    print "</ul>\n    count++;
    }
mysql_close ($connection);
?>
```

12. What MySQL operation is equivalent to the PHP code on line 3 of the above code?

   use zxyx999; -- selecting the database to use

13. What MySQL operation is equivalent to the PHP code on line 4 of the above code?

   Performing the query "SELECT * FROM timetable ORDER BY COURSE;"

14. There is a syntax error on line 10. What is it?

    There is a semi-colon missing from the end of the line of code.

15. What is the security risk in letting clients see this source code?

    In line 2, the MySQL database username and password is visible.

16. $record is an array. Describe what the values of $index are going to be, when we print them out as part of the string in line 10.

    $index contains the field/column names from the table output from the query performed in line 4. The argument MYSQL_ASSOC in the mysql_fetch_array() function call in line 6 forces the index values of the array to be the field names, not integer values 0, 1, 2, etc.