

Name: _____

CS 122 Advanced Perl Programming Quiz Two

There are 17 questions. Please, read each question carefully before answering.

1. What is the format of the data stored in a **QUERY_STRING** variable when GET method is used?
2. What is the main difference between **use** and **require** methods of importing modules?
3. Write a Perl statement to remove the first two elements of **@letters = ('aa' .. 'az')** using function **splice**.
4. Perl divides variables into three scoping types: *global* scope, *lexical* scope and *dynamic* scope. Which variables are inserted into a package's symbol table when a package is created?
5. Which special variable stores the list of arguments passed to a subroutine?
6. Use function **splice** to replace the fifth element of **@num = (1 .. 12)** by **77**.
7. Which statement when executed in a repetition structure causes immediate exit from the structure?
8. What is the output of the following code segment:

```
my %hash = (one => 'I', two=>'II', three => 'III',  
           four =>'IV', five => 'V', six => 'VI',  
           seven =>'VII', eight =>'VIII',  
           nine => 'IX', ten => 'X');  
  
print "%hash\n";
```

9. What is the output of the following code segment:

```
my $num = 1;
my @ar = ('a' .. 'c');
my %hash = (1=>'one', 2=>'two');
&display($num, @ar, %hash);

sub display
{
    print "@_\n";
}
```

10. Consider program `fig07_08.pl` in Deitel “Perl How to Program” on p.233. Line 11 uses a `read` function to retrieve the form data sent with the `POST` method. Suppose, we replace line 11 with the following statement:

```
$data = <STDIN>;
```

Briefly explain a potential problem resulting from such a replacement.

11. What is the return value of function `wantarray()` in the code segment below?

```
print "Found " . find_names();
print "\n";

sub find_names
{
    .....
    if (wantarray()) {}
    .....
}
```

12. What is the output of the following code segment:

```
my @array = ( 0 .. 12);
my @n = splice(@array, 8);
print "@array\n";
print "@n\n";
```

Name: _____

13. Fill in the missing line in the code to produce the output shown below:

```
%hash = ('Volkswagen'=>'Wolfsburg', 'BMW'=>'Muenchen',  
         'Mercedes-Benz'=>'Stuttgart');
```

```
while (($key, $value) = each (%second))  
{  
    print "$key\t$value\n";  
}
```

output starts here:

```
Muenchen      BMW  
Wolfsburg     Volkswagen  
Stuttgart     Mercedes-Benz
```

14. Write down the next lines of output from the following code segment:

```
for ( 1 .. 4){  
    srand(2);  
    for ( 1 .. 2){  
        print 1 + int (rand(15)), "\t"; }  
    print "\n"; }
```

output starts here:

```
14      3
```

15. Consider the following module:

```
package MyPackage;  
my $var = 5;  
my $x = "hello" x 5;
```

What is the output from the program below?

```
#!/bin/local/perl -w  
require MyPackage;  
print $MyPackage::x;  
print $MyPackage::var;  
exit;
```

Name: _____

16. Write a statement that imports all variables (array, hash, scalar, etc) using symbol names **myVar** and **yourVar** from module **MyModule**.

17. Modify the correct solution to Problem 10 from the Midterm Exam 1 below in the following fashion:
 - a. Define a constant **ZERO** with the value **-459.12**.
 - b. Change the appropriate statement to make use of the constant.

```
print "Enter the beginning and ending temperatures ";
print "and an increment on one line separated by ";
print "spaces\n";

my ($begin, $end, $incr) = split(/ /, <STDIN>);

if ($begin < -459.12 || $end < $begin)
{
    print "invalid input\n";
}
else
{
    print "Fahrenheit\tCelsius\n";
    while ($begin < $end)
    {
        printf("%.2f\t%.2f\n", $begin, ($begin - 32)/1.8);
        $begin += $incr;
    }
    printf("%.2f\t%.2f\n", $end, ($end - 32)/1.8);
}
```