

## CIS166 - Programming in Perl

### Fall 2004 Pop Test

- 1) Computers are:
  - ☒ Mindless devices capable only of doing what they are told.
  - ☐ A recreation of the human mind.
  - ☐ Able to determine what needs to be done, and do it with out help.
  - ☐ A device that you can love, and can love you back.
- 2) An algorithm is:
  - ☐ language independent.
  - ☐ a set of instructions to solve a problem.
  - ☒ both of the above.
  - ☐ none of the above.
- 3) Scalar variables can hold:
  - ☐ More than one value.
  - ☐ Only references to other variables.
  - ☒ One value.
  - ☐ None of the above.
- 4) What are the types of Literal Strings?
  - ☐ Single-quoted
  - ☐ Double-quoted
  - ☐ Word-quoted
  - ☒ All of the above.
- 5) Single quoted strings:
  - ☐ Allow you to interpolate variables values into the string.
  - ☒ Are the most literal representation of a string.
  - ☐ Are a quote from a famous person.
  - ☐ None of the above.
- 6) A value is said to be true if:
  - ☐ It's value is zero.
  - ☐ It's value is the empty string.
  - ☒ It's value is something other that the empty string or zero.
  - ☐ It's value is 1.
- 7) The dollar sign symbol (\$) is used to:
  - ☐ Tell you have a literal dollar amount.
  - ☒ A scalar variable.
  - ☐ The value you expect back from a variable access is a scalar.
  - ☐ None of the above.

Use the following program to answer the next three questions. **DO NOT ENTER THE PROGRAM AND RUN IT!:**

```
#!/usr/bin/perl -w
use strict;

my $hash = {
    May => 'Month',
    Me => 'Mark Trail',
    Mo => 'Three Stooges',
    Moo => 'Milk Cow'
};

foreach my $key (sort values %$hash) {
    print "$key:$hash->{$key} ";
}
```

8) In the foreach line, the %\$hash is evaluated in what context?

- ☒ Hash Context  
☐ Scalar Context  
☒ LIST Context  
☐ Expression Context

9) What will be the output of the program

- ☐ May:Month Me:Mark Trail Mo:Three Stooges Moo:Milk Cow  
☐ May:Month Me:Mark Trail Moo:Milk Cow Mo:Three Stooges  
☒ Me:Mark Trail Moo:Milk Cow May:Month Mo:Three Stooges  
☐ Indeterminate because we don't know the order the keys will come out of the hash.  
☒ There is an error in the program, and no output will be given.

10) The value in \$key is:

- ☒ a Scalar value.  
☐ an Array reference.  
☐ a Hash table.  
☐ a Hash reference.

- 11) TIMTOWTDI stands for (See the Perl reference page on [www.perldoc.com](http://www.perldoc.com)):

*There Is More Than One Way To Do It*

- 12) A statement modifier is:

- ☐ a option that can follow a match or substitution operator.
- ☐ a program that converts english sentences from past tense to present tense.
- ☒ a control structure that can be appended to a single statement.
- ☐ a command line option to the Perl executable itself, that modifies the behavior of the executing script.

- 13) my Variables are:

- ☐ A way to show ownership of a variable.
- ☒ local to the scope they are defined in.
- ☐ local or global by how they are named.
- ☐ None of the above.

- 14) The argument to a user defined subroutine are defined:

- ☐ By explicitly defining the arguments by name in the subroutine definition.
- ☒ in the @\_ array.
- ☐ in the variables \$1, \$2, \$3, etc.
- ☐ You must pass variables using locally defined name using my ( ).

- 15) Match the Regular Expression Meta-character to it's definition:

*	A class of characters
+	Match any single character except newline
[]	Zero or more of the previous match
.	A word boundary
\b	1 or more of the previous match
?	Zero or 1 of the previous match

- 16) The -r operator:
- ☐ Removes the file that is its argument.
  - ☒ Returns a true value if the file that is its argument is readable.
  - ☐ Restore the last value in the variable that is its argument.
  - ☐ None of the above.
- 17) What module would you use to process command line options that are longer than a single character (-file, -remove, etc.)

Getopt::Long

- 18) How would you include a module into your program?
- ☐ include 'module';
  - ☒ use 'module';
  - ☐ require 'module'
  - ☐ all of the above.
- 19) Object-oriented programming is described by (Select more than one):
- ☒ Abstraction
  - ☐ Evacuation
  - ☐ Trepidation
  - ☒ Encapsulation
  - ☒ Inheritance
  - ☒ Polymorphism
  - ☐ Anitestablishmentaryism

- 20) In Perl, how do you create a Class:

Build a package

- 21) In Perl, how do you create a method:

Write a subroutine

- 22) In Perl, how do you create an object:

Bless a reference

- 23) To show that a class is inherited, you:
- ☐ Add the parent class to the @INC variable.
  - ☐ Declare the parent class on the package statement.
  - ☒ Set the values of the @ISA variable to the parents.
  - ☐ None of the above.
- 24) Perl uses what variable to hold the ".pm" search path:
- ☐ %ENV
  - ☐ \$\_
  - ☒ @INC
  - ☐ @ISA
- 25) Write a POD module in the space below that describes a module. Include ONLY the sections NAME test\_taker, DESCRIPTION This module takes a test, AUTHOR <your name>.

= head1 Name  
test\_taker

= head1 Description  
This module takes a test

= head1 AUTHOR  
Chris Tjon