

Name: _____

Date: _____

Question:	1	2	3	4	5	6	7	Total
Points:	20	0	5	5	5	5	5	45
Score:								

1. (20 points)

- ☐ I've downloaded and successfully installed on my computer virtualization software and the phys2200 appliance
- ☐ for this class I am using computers in the physics computer lab

Sign and date here: _____

All questions below are multiple choice ones. Only one choice per question is correct. Unless requested otherwise, answer the questions using the information provided in the article *Scalable computer programming languages*.

2. (0 points) What programming language was compared to “an octopus made by nailing extra legs onto a dog”.

- ☐ C
- ☐ C++
- ☐ Smalltalk
- ☐ Perl
- ☐ Lisp

3. (5 points) In simple words, what is a *scalable programming language*

- ☐ A programming language that is suitable for writing fast running programs
- ☐ A programming language that is suitable for programming large and small projects
- ☐ A programming language that is suitable for programming scalable algorithms
- ☐ A programming language to write programs that can be scaled to make them smaller
- ☐ A programming language that allows a software company to expand (scale) its services into new geographic areas

4. (5 points) What feature is **not** required in a *scalable programming language*
- ☐ Garbage collection
 - ☐ Trash removal
 - ☐ Exception handling
 - ☐ Code readability
 - ☐ Run-time error checking
5. (5 points) In simple words, what is a *scalable algorithm*
- ☐ An algorithm that can only be implemented using a scalable programming language
 - ☐ An algorithm which weight can be determined using a scale
 - ☐ An algorithm that works for small scale jobs and is equally effective when jobs grow to being large
 - ☐ Another name for a computer program
 - ☐ An algorithm that must have a loop when implemented in a programming language
6. (5 points) In simple words, what the term *garbage collection* means
- ☐ The term is a synonym with trash removal
 - ☐ The term is the name of the procedure to motivate students to learn scalable programming languages by forcing them to get rid of bad programming habits
 - ☐ That is a feature that only Python programming language has
 - ☐ The term is a name for a programming language feature that prevents the language from being usable for implementing large projects.
 - ☐ The term means automatic “freeing” of memory that is no longer being used. The “freeing” is done by computer language’s runtime system.
7. (5 points) What are the tasks that C language preferably **not** be used for
- ☐ Developing large software projects
 - ☐ “Bare-metal” programming
 - ☐ Implementing “better” languages
 - ☐ Developing application that has to run as fast as possible
 - ☐ Programming numerical algorithms