**CSC 142 Practice Exam #1 Spring, 2019**

1. The first computer programmer was :

A.) Ada Lovelace B.) John Von Neumann

C.) Charles Babbage D.) Alan Turing

1. Matching:

a.) communication device 1.) Printer

b.) input device 2.) RAM

c.) main memory 3.) keyboard

d.) storage device 4.) hard disk

e.) output device 5.) modem

1. The binary system expresses a number using two kinds of digit, 0 and 1. A binary digit is called a \_\_\_\_\_\_\_.
2. (T/F) There are 8 bits in one byte.
3. What decimal number is equivalent to the binary number 111001?
4. What is 00A7 in decimal?
5. Matching:
6. An interconnected network of individual networks 1.) internet
7. A repository for program instructions and data 2.) LAN

manipulated by the program during execution

1. Connects computers in a single building or nearby 3.) ALU

buildings

1. The brain of the computer 4.) memory
2. The part of the CPU that does arithmetic 5.) CPU

computations.

1. Programming languages are classified into 3 levels: machine language, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and high level languages.
2. (T/F) Each type of CPU has its own machine language.
3. Assembly language requires \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to translate assembly code to machine code, while a high level language requires \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to translate to machine code.
4. Java, C++, Fortran are all examples of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ languages.
5. Which of the following are ***valid*** identifiers in java?
6. 4Execution
7. \_foobar
8. $included
9. import
10. (T/F) A Java application is a stand-alone program that does not require a web browser.
11. Matching:
12. is a template or mold that defines the 1.) A method

behavior and data of its instances.

1. is an instance of a class. 2.) An argument
2. is a sequence of instructions for a class 3.) An object

or an object to follow.

1. is a value passed to an object in a message. 4.) A class
2. (T/F) A **class** must be defined before you can create an **instance** of that class.
3. Sending a message to a class or object is the same as calling a \_\_\_\_\_\_\_\_\_\_\_\_ of the class or object.
4. (T/F) All instances of a class possess ***the same set*** of data values.
5. (T/F) All instances of a class possess ***the same*** data values.
6. Circle the correct UML diagram for an object ‘sedan’ of class Vehicle:

sedan:Vehicle

sedan:Vehicle

1. A data value that can change is called \_\_\_\_\_\_\_\_\_\_\_\_\_ and one that cannot change is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. In the Software Life Cycle, which phase comes first? (Coding, Design, Requirements Analysis, Testing)
3. Find the 3 errors in the following program:

import javax.swing.\*;

Class JavaTest1 {

Public static void main ( String[] args) {

myString String;

myString = new String(“Enter your StudentID: “);

System.out.println(myString)

}

}

1. What will be displayed on the message dialog when the following lines are executed?

String name = “Fabio”;

System.out.print(name.indexOf ( “b” ) );

System.out.println(name.indexOf ( “bi” ) );

1. What will be displayed on the message dialog when the following lines are executed?

String name1 = “Elvis”;

String name2 = “Aron”

String space = “ “;

String name3 = name1 + space + name2;

System.out.println(name3.length());

1. Draw the arrows for the state-of-memory diagram after the following code has executed:

String tuco, blondie, douglas;

tuco = new String(“Tuco”);

blondie = new String(“Blondie”);

douglas = tuco;

tuco = blondie;

douglas

**®**

tuco

**®**

blondie

**®**

: String

: String