CONNECTICUT COLLEGE   **COM110: Quiz3**

For this quiz you will write a response and upload your PDF result. Responses can be handwritten or typed but you will need to make sure to run a pdf conversion on either. Each short response should be a paragraph (3-5 sentences).

<u>circle all answers that apply</u> (add writing if it helps to make clear!)

[1 5pts] In python3 classes are:
    (a) different ways of processing data
    (b) user defined data types
    (c) stuff that knows stuff
    (d) an object orientated solution

[2 5pts] OOD stands for:
    (a) Objects Of Data
    (b) Overloaded Object Development
    (c) Object Orientated Design
    (d) Object Originating Definition

[3 5pts] In python3 we define objects by:
    (a) class definition which has instance variables and methods
    (b) object definition which has instance variables
    (c) doing nothing
    (d) class definition which has the def keyword

[4 5pts] Instance variables are different from global variables because:
    (a) they appear outside of the scope
    (b) they appear outside of the class definition
    (c) they appear inside the function definition
    (d) they appear inside the __init__ definition of a class

[5 5pts] In python3 the class 10y is valid syntax:
    (a) unless the user specifies
    (b) never
    (c) sometimes
    (d) always

[6 5pts] In python3 what is __init__ ?
    (a) base class for all objects
    (b) initializer function for classes
    (c) constructor method for each class definition
    (d) instance method for accessing data

[7 5pts] The two categories of methods we discussed in lecture were?
    (a) the data access and data writer
    (b) the data variant and data processor
    (c) data encapsulation and inheritance
    (d) accessors and mutators

[8 5 pts] If you want class A to have everything from class B you start by:
    (a) object A = B:
    (b) class A == B:
    (c) class A(B):
    (d) object A(B):

[9 short response 20 pts] Describe what you think encapsulation is and its purpose related to a python3 program. (Hint: use **Figure 1 TJB** lecture notes)

[10 short response 20 pts] You are designing a new data type to represent cats and the internal state should be lives, fur, meow and speed. Can you put together a short definition that has at least one mutator and accessor that connects to the afore mentioned state information?

[11 short response 20 pts] Does ChatGPT have difficulty creating new data types? Why do you think that is the case? Support your answer by prompting ChatGPT with [10] and pasting its answer here.