**Assignment-2**

Q.1 => What is the relationship between classes and modules?

**Answer :-**

**Modules are collection of method and constant. They cannot generate instance.**

**Classes may generate instances and classes have instance variable.**

Q.2 => How do you make instances and classes?

**Answer :-**

**To create instance of class you call the class using class name and pass arguments its \_\_init\_\_ method accepted.**

Q.3 => Where and how should be class attributes created?

**Answer :-**

**Class attributes are the variable that are defined directly in the class that are shared by all object of class.**

Q.4 => Where and how are instance attributes created?

**Answer :-**

**Instance attributes or properties attached to a instance of a class.**

**Instance attributes are defined in the constructor, defined directly in the class.**

Q.5 => What does the term "self" in a Python class mean?

**Answer :-**

**The self parameter is reference to the current instance of a class, and used to access the variable that belongs to class.**

Q.6 => How does a Python class handle operator overloading?

**Answer : -**

**The operator overloading in python means provide extended meaning beyond their predefined operational meaning.**

**Such as we use “+” Operator for adding two integers as well as joining two string and adding two lists.**

**We can achieve this as the “+” operator overloaded by “int” class as well as “str” class.**

Q.7 => When do you consider allowing operator overloading of your classes?

**Answer :-**

**Such as we use “+” Operator for adding two integers as well as joining two string and adding two lists.**

**We can achieve this as the “+” operator overloaded by “int” class as well as “str” class.**

Q.8 => What is the most popular form of operator overloading?

**Answer :-**

**Very popular example is Addition (+) operator, The “+” Operator operate on two integer and the same operator operate on two string as well.**

**It perform addition on two integer and perform concatenation on two string.**

Q.9 => What are the two most important concepts to grasp in order to comprehend Python OOP code?

**Answer : -**

**Inheritance and polymorphism.**