Q1. What is the meaning of multiple inheritance?

When a class is derived from more than one base class it is called multiple Inheritance. The derived class inherits all the features of the base case.

Q2. What is the concept of delegation?

Delegation is an object oriented technique (also called a design pattern). Let's say you have an object x and want to change the behaviour of just one of its methods. You can create a new class that provides a new implementation of the method you're interested in changing and delegates all other methods to the corresponding method of x.

The delegation is accomplished via the **getattr** method; consult the language reference for more information about controlling attribute access.

Q3. What is the concept of composition?

It is one of the fundamental concepts of Object-Oriented Programming. A class that references to one or more objects of other classes as an Instance variable. Here, by using the class name or by creating the object we can access the members of one class inside another class. It enables creating complex types by combining objects of different classes. It means that a class Composite can contain an object of another class Component. This type of relationship is known as Has-A Relation.

Q4. What are bound methods and how do we use them?

A bound method is the one which is dependent on the instance of the class as the first argument. It passes the instance as the first argument which is used to access the variables and functions.

class Sample:  
 def fun(self, some\_value):  
 self.some\_value = some\_value  
s = Sample()  
print(s.fun)

<bound method Sample.fun of <\_\_main\_\_.Sample object at 0x000001F0A85C7580>>

Q5. What is the purpose of pseudo private attributes?

In Python, pseudo private attributes, commonly referred to as name mangling, are used to make a method name or instance variable private, or at the very least more difficult to access from outside the class. Pseudo private attributes are used to guard against unintentional alteration or access by outside code while still allowing for access and modification by methods inside the class.

True private attributes are not a thing in Python, therefore any attribute of a class may be accessed from outside the class. But, Python has a name mangling feature that enables you to designate that an attribute should be considered as private by prefixing the name of the attribute with two leading underscores.