Q1. What is the purpose of Python's OOP?

Answer: The concept of Object-oriented programming makes it easier to maintain and debug codes faster. OOP is a method which structures a program by bundling related properties together.

Q2. Where does an inheritance search look for an attribute?

Answer: The inheritance search looks for the attribute first in the instance object, then in the class in which the instance was created from, then in all higher super classes.

Q3. How do you distinguish between a class object and an instance object?

Answer: An Object is an instance of a class. Class is a template with which the objects are created.

Q4. What makes the first argument in a class's method function special?

Answer: The method becomes class. This is the reason why the first parameter must be the object itself. When multiple objects are created the class has to hold these objects, so the methods in classes are explicitly defined with the keyword 'self' followed by parameters if any in order the specify the object with which it was called,

Q5. What is the purpose of the __init__ method?

Answer: The __init__ method allows to initialize an object's attributes. It is used within classes only.

Q6. What is the process for creating a class instance?

Answer: Whenever an object is required, we create a new instance of the class with a different name. The name can be anything. The syntax is,

A = class_name(parameters)

Where A is the instance of the class.

Q7. What is the process for creating a class?

Answer: The process of creating a class is to create a template for any repetitive process of same kind.

Syntax: class class_name(arguments)

Q8. How would you define the superclasses of a class?

Answer: A parent class is also called as superclass as all the subclasses are derived from these parent classes and inherits the properties of these classes based on the access modifiers specified.