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

Answer : OOP is programming paradigm that allows concept of abstraction through the concept of interacting entities.

It comes up with following advantages :

1. It helps to divide our over all program in different small segments and thus making its solving easy with use of objects.
2. Helps in easy maintenance and modification of existing program.
3. Multiple instances of an object can be made.
4. Use of existing code can be made easy, reduce time to write code from scratch.
5. Building up secure programs become easy for the programmer.

Q2. Where does an inheritance search look for an attribute?
Answer : Python searches upward in trecof attributes, which grows from an instance , to the class it was generated from , to all superclasses listed in this class header.

Q3. How do you distinguish between a class object and an instance object?
Answer :
1. Class is a template for creating an objects,object is an instance of a class.
2. Object aquires a memory whenever they are created, but classes does not.
3. Class can be created once, but many objects can be created using a class.
4. As classes have no allocated memory, they can't be manipulated. Objects can be manipulated.

Q4. What makes the first argument in a class's method function special?
Answer : "self" is the first argument in a class's method function, it refers to object itself.
As python doesn't have "@" to access object attributes like other programming languages, so self variable is used in Python.

Q5. What is the purpose of the __init__ method?

Answer : __init__(self,...) Method in python , it is called for object construction. It's purpose is to initialise every object state.

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

Answer : For creating a class instance, we call the class by its class name and pass the arguments it's init method accepts.
E.g. class_instance=class1("abc",123). Here class_isntance is class instance of class1 with attributes "abc" and 123.

Q7. What is the process for creating a class?
Answer : "class" keyword creates a class. class keyword is followed by classname followed by a collon.
E.g. class Person : , this creates a class named "Person".

Q8. How would you define the superclasses of a class?
Answer : Super class is given as a parameter to child class. E.g class Student (Person) : ,where child class Student inhirets properties of super class Person.