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

**Answer**: OOP is a concept in python programming that uses objects and classes and implements functions like inheritance, abstraction, inheritance and polymorphism. OOP provides clarity and programming structure which makes the code easy to reuse, implement, extend, share and protected

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

**Answer**: Inheritance search is a search of an attribute in the programming tree from bottom to top looking for the lowest occurrence of an attribute name.

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

**Answer**: Class objects are called by the Class name and instance objects are called by the object of the class which contains the instance. Instance refers to copy of the object , and object refers to the memory address of the class.

Example: **Class Object**
 <Class_Name>.Class_Attribute

**Instance Object**
<Class_Instance>.Instance_Attribute

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

**Answer**: the first argument denotes whether the function is called by an instance of the class or not. If not, the function is treated as a class attribute, or a decorator function.. If the first argument is self, it points towards the memory address of the class containing all its internal variables. Self refers to the newly created object of the class.

Q5. What is the purpose of the __init__ method?

**Answer**: The __init__ function is called everytime an object is created for a class. Or when the class is instantiated. The __init__ method makes the class variables available for the object or in other words it instantiates the object's attributes.

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

**Answer**: The class instance can be created by calling the Class by its name , ClassName() and passing parameters if any defined in the __init__ method. To pass parameters to class instance, an __init__ method must be present in the class

Q7. What is the process for creating a class?

**Answer**: To create a class in python, the pre-defined keyword "class" has to be used before the class name, followed by a colon, then the required indentation and then containing the class attributes, functions, static methods, variables etc

**class pudina:**
      **def __init__():**
            **defn**

      **def method():**
            **defn**

Q8. How would you define the superclasses of a class?
**Answer**: The superclass is a class from which a class inherits all its public and protected attributes, such as functions and variables. The class which inherits from the superclass is called the child class or heir class.