

**Q1. What is Abstraction in OOps? Explain with an example.**

ANS : Abstraction in python is defined as a process of handling complexity by hiding unnecessary information from the user. real-life example of a man driving a car.

**Q2. Differentiate between Abstraction and Encapsulation. Explain with an example.**

ANS : Abstraction is a design level process and it is used to reduce the complexity at the designing stage of a project. Encapsulation is an implementation level process, and it is used to provide privacy and maintain control over the transparency of data at the implementation stage of a project.

**Q3. What is abc module in python? Why is it used?**

ANS : The 'abc' module in Python library provides the infrastructure for defining custom abstract base classes. 'abc' works by marking methods of the base class as abstract. This is done by @abstractmethod decorator.

**Q4. How can we achieve data abstraction?**

ANS : abstraction can be achieved by using abstract classes and methods in our programs.

**Q5. Can we create an instance of an abstract class? Explain your answer.**

ANS : No, we cannot create an instance of an abstract class because an abstract class is an incomplete class that is meant to be extended by its subclasses. It serves as a blueprint for the subclasses to follow and provides a common interface for them to implement.