Question 1: Define Object Oriented Programming Language?

Answer: An “Object” is the key component of Object-oriented programming. An Object may contain data (fields or variables) or code (methods or procedures). The creation of these objects is based on a programmer-defined blue-print also known as a Class.

Question 2: List down the Benefits of OOP?

Answer:

* Inheritance
* Polymorphism
* Abstraction
* Encapsulation

Question 3: Differentiate between function and method?

Answer: A function is a piece of code that is called by name. It can be passed data to operate on the parameters and can optionally return data the return value. All data that is passed to a function is explicitly passed. A method is a piece of code that is called by a name that is associated with an object.

Question 4: Define the following terms:

1. Class: class is a blueprint for creating objects

2. Object: object is an instance of a particular class

3. Attribute: Attributes are data stored inside a class or instance and represent the state or quality of the class

4. Behavior: Behavior is the only way objects can do anything to themselves or have anything done to them.

Question 5: Write a code in python in which creates a class named it Car which has 5 attributes such like (model, color and name etc.) and 3 methods. And create 5 object instances from that class.

class Car:  
 model = "2019"  
 color = "White"  
 name = "Gli"  
 design = "xrxs"  
 number = "444"  
  
 def showCar(self):  
 print("model :" + Car.model,  
 "\nColour :" + Car.color,  
 "\nName :" + Car.name,  
 "\nDesign :" + Car.design,  
 "\nNumber :" + Car.number)  
  
 def updateCar(self, m, c, n):  
 Car.model = m  
 Car.color = c  
 Car.number = n  
  
 def removeCar(self):  
 print("All Cars Removed")  
  
  
car1 = Car()  
car2 = Car()  
car3 = Car()  
car4 = Car()  
car5 = Car()  
car1.showCar()  
car2.updateCar("2233","red","345")  
car2.showCar()