**Assignment # 6**

**Question 1:**

**Define Object Oriented Programming Language?**

**OBJECT ORIENTED PROGRAMMING LANGUAGE:**

Object-oriented programming language" redirects here. For a list of object-oriented programming languages, see [List of object-oriented programming languages](https://en.wikipedia.org/wiki/List_of_object-oriented_programming_languages)*.*

**Question 2:**

**List down the Benefits of OOP?**

**BENEFITS OF OOP:**

1 It provides a clear modular structure for programs which makes it good for defining abstract datatypes in which implementation details are hidden

2 Objects can also be reused within an across applications. The reuse of software also lowers the cost of development. More effort is put into the object-oriented analysis and design, which lowers the overall cost of development.

3 It makes software easier to maintain. Since the design is modular, part of the system can be updated in case of issues without a need to make large-scale changes

4 Reuse also enables faster development. Object-oriented programming languages come with rich libraries of objects, and code developed during projects is also reusable in future projects.

**Question 3:**

**Differentiate between function and method?**

**DIFFERENTIATE BETWEEN FUNCTION AND METHOD:**

A function is a piece of code that is called by name. It can be passed data to operate on (i.e. 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

2. Object

3. Attribute

**ANSWER:**

**CLASS:**

In object-oriented programming, a class is a template definition of the method s and variable s in a particular kind of object.

**OBJECT:**

As the name object-oriented implies, objects are key to understanding object-oriented technology.

**ATTRIBUTE:**

In Object-oriented programming (OOP), classes and objects have attributes. Attributes are data stored inside a class or instance and represent the state or quality of the class or instance. In short, attributes store information about the instance.