**MODULE: 4**

**OOPS Concept**

**Basic Concepts of OOP**

**2. What is OOP? List OOP concepts?**

**Ans**:- Object-oriented programming – As the name suggests uses objects in programming. Object-oriented programming aims to implement real-world entities like inheritance, hiding, polymorphism, etc. in programming. The main aim of OOP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except that function.

There are some basic concepts that act as the building blocks of OOPs i.e.

1. Class
2. Objects
3. Encapsulation
4. Abstraction
5. Polymorphism
6. Inheritance
7. Dynamic Binding
8. Message Passing

**3. What is the difference between OOP and POP?**

**Ans:-** Difference between OOP and POP:

| **OOP** | **POP** |
| --- | --- |
| Object oriented | Structure oriented |
| Program is divided into objects. | Program is divided into functions. |
| Bottom-up approach. | Top-down approach. |
| Inheritance property is used. | Inheritance is not allowed. |
| It uses access specifier. | It doesn’t use access specifier. |
| Encapsulation is used to hide the data. | No data hiding. |
| Concept of virtual function. | No virtual function. |
| Object functions are linked through message passing. | Parts of program are linked through parameter passing. |
| Adding new data and functions is easy | Expanding new data and functions is not easy. |
| The existing code can be reused. | No code reusability. |
| use for solving big problems. | Not suitable for solving big problems. |
| C++, Java. | C, Pascal. |