**Software Engineering Assignment**

**MODULE: 4.1 (OOP)**

1. What is OOP? List concepts of OOP.

Ans. OOP stands for **O**bject **O**riented **P**rogramming. In this type of programming the process can happen in random order. It creates objects that contain data and method, rather than writing procedures or methods that perform operations on the data. Examples of OOP languages are C++, Java, Pearl, Asp.net, etc.

Following are the concepts of OOP:

1. Class
2. Object
3. Encapsulation
4. Abstraction
5. Inheritance
6. Polymorphism
7. What is the difference between OOP and POP?

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|  | **OOP** | **POP** |
| 1. | Object Oriented Programming | Procedure Oriented Programming |
| 2. | Process can happen in random order | Process follows specific steps/protocols |
| 3. | Emphasis on objects | Emphasis on functions |
| 4. | Modification is easier as objects are independent | Modification is difficult as they can affect the entire program |
| 5. | Divides the program in multiple objects | Divides the program in multiple functions |