

## Unit -3: Object Oriented Programming Concepts

### Assignments:

1. What are the benefits of object- oriented programming?
2. What are the drawbacks of procedural language? Explain the need of object-oriented programming with suitable program. Also explain the Various attributes of object-oriented programming.
3. Explain class and object with suitable example.
4. What are benefits of package? How to create package in java? Explain with suitable java code segment.
5. Define OOP. Write characteristics of OOP language.
6. Differentiate between abstraction and encapsulation in java with suitable example.
7. Define polymorphism. How do we achieve polymorphism in java with explain with example.
8. Define constructor. What are the rules to create a Java constructor explain all types with suitable example.
9. Define nested classes in Java. Explain all types with suitable example.
10. Define recursion. What a java program to find the factorial of any number using recursion.
11. What are pass by value and pass by reference in java with suitable example.
12. Differentiate between constructor and method in Java with suitable example.
13. Write short notes on the following:
  - a. this keyword
  - b. Arrays
  - c. final keyword
  - d. static keyword