

# OBJECT ORIENTED PROGRAMMING USING JAVA

## THEORY ASSIGNMENT – 1 [ANY TEN]

**Submission Date: On or Before 8<sup>th</sup> April 2023**

1. Explain below concepts of OOP [with real life example ]:
  - a. Class
  - b. Object
  - c. Abstraction
  - d. Encapsulation
  - e. Inheritance
  - f. Polymorphism
2. Explain features of Java.
3. What is JVM?
4. What is Bytecode?
5. What is constructor? Explain constructor overloading with example.
6. Explain use of “this” and “super” with appropriate example.
7. Explain static - method, block & variable with appropriate example.
8. Explain final – class, method & variable with appropriate example.
9. Explain abstract – class & method with appropriate example.
10. What is method overloading? Explain with example.
11. What is inheritance? Explain various types of inheritance with example.
12. What is interface? What is the need of it? Explain with appropriate example.
13. What is pass by value and pass by reference?
14. Explain any 10 methods of String class with example.
15. What is wrapper class? Explain autoboxing and unboxing?
16. What is package? How to create and use package? Explain with appropriate example.
17. What are access modifiers? Explain them with respect to package with example.
18. Differentiate :
  - a. Abstract class and interface
  - b. Class and object
  - c. Static and non-static
  - d. Procedural programming vs Object oriented programming
  - e. Method overloading vs Method Overriding
  - f. Abstract vs final