Object Oriented Programming Language Complete Syllabus

- Understanding the compilation process of the JVM, JVM vs JDK vs JRE.
- 2. Feature of java.
- 3. Difference between C and java
- 4. Key Feature of java.
- 5. Structure of a Simple java program.
- 6. Strongly types nature of java.
- 7. Primitive datatype types.
- 8. The new 'var' keyword.
- 9. Scope of variable.
- 10. Declare structure of java class.
- 11. Declare member of java class(field method).
- 12. Declaring and using java objects.
- 13. Signature of a method.
- 14. Types of methods.
- 15. Static and Non-static method.
- 16. Constructor of a class.
- 17. Constructor overloading.
- 18. Using the scanner class.
- 19. Using command-line argument.
- **20.** Declaring and initializing one-dimension and two-dimension array.
- 21. Introduction to java.util.Arrays class.
- **22.** Sequence, selection, Iteration and transfer statements for each loop.
- 23. String Data type, commonly used method in from String class, StringTokenize, StringBuffer, StringBuilder.
- **24.** Using access modifier within a class, principle of encapsulation.
- 25. Declaring Sub class and Super class.
- **26.** Constructor chaining, this, this() super and super().
- 27. Abstract class
- 28. Extends abstract class
- 29. Polymorphism by overriding method.
- 30. Differentiate overloading, overriding and method hiding.
- **31.** Declaring and using java object, life-cycle of object garbage collection.
- 32. Create and import package, static import
- 33. Abstract program logic to packages
- 34. creating executable main class with package
- 35. running the executable class inside a package.
- 36. Constructor in abstract class.
- 37. Create and implements interface.

- 38. default and private method in interface.
- 39. Marker interface.
- 40. Need of exception handling.
- 41. Exception and Error Hierarchy.
- 42. Checked and Unchecked Exception.
- 43. try-catch and finally block.
- 44. throws and throw keyword.
- 45. Create and handle custom exception.
- 46. Life cycle of thread.
- **47.** Creating a thread by extends Thread class or by implements Runnable interface.
- 48. Thread priority.
- **49.** sleep() method.
- 50. Wrapper class in java.
- 51. Auto-Boxing and Auto-Unboxing.
- 52. Collection Hierarchy, Base interface List Set and Map.
- 53. Create generic class, generic methods, diamond operator, wildcard.
- 54. JDBC Driver.
- 55. Connection to a MySQL database.
- **56.** Connection interface, DriverManager class, Statement interface, ResultSet interface, PreparedStatement.
- 57. Regular expression, Pattern and Matcher class.
- 58. Lambda Expression in java.
- 59. Functional interface.
- **60.** Introduction to the Stream API, using lambda expression in Stream.