**JSE (Core Java) 15 sessions**

**I. Introduction**  
1. Why Java is necessary   
2. Paradigms  
3. Diff b/w Java & Other (C,C++)  
4. Java history  
5. Java features  
6. Java programming format  
7. Java Tokens  
8. Java control Statements  
9. Java Data Types  
10. Typecasting  
11. Arrays

**Assignments : YES**

**II. OOPS**

1. Introduction   
2. Class  
3. Object  
4. Static Keywords  
5. Constructors  
6. This Key Word  
7. Inheritance  
8. Super Key Word  
9. Polymorphism (Over Loading & Over Riding)  
10. Abstraction  
11. Encapsulation  
12. Abstract Classes  
13. Interfaces

**Assignments : YES**

**III. STRING MANIPULATIONS**

1. String  
2. String Buffer  
3. String Builder

**IV. PACKAGES**

1. Introduction to all predefined packages  
2. User Defined Packages  
3. Access Modifiers

**Assignments: YES**

**V. EXCEPTION HANDLING -**

1. Introduction  
2. Pre Defined Exceptions   
3. Try-Catch-Finally  
4. Throws, throw  
5. User Defined Exception examples

**ASSIGNMENTS : YES**

**VI. MULTITHREADING**

1. Thread Creations  
2. Thread Life Cycle  
3. Life Cycle Methods  
4. Synchronization  
5. Wait() notify() notify all() methods

**VII. WRAPPERCLASSES**

1. Introduction   
2. Byte, Short, Integer, Long, Float, Double, Character, Boolean classes.

**Assignments : YES**

**VIII. COLLECTION FRAME WORK**

1. Introduction   
2. Util Package interfaces, List, Set, Map   
3. List interface & its classes   
4. Set interface & its classes   
5. Map interface & its classes

**ASSIGNMENTS: YES**

**IX. I/O STREAMS**

1. Introduction  
2. Byte-oriented streams  
3. Character – oriented streams  
4. File  
5. Random-access file  
6. Serialization

**ASSIGNMENTS : YES**

**X.INNER CLASSES**

1. Introduction   
2. Member inner class   
3. Static inner class   
4. Local inner class   
5. Anonymous inner class

**ASSIGNMENTS : YES**

**Daily Schedule**

(10:00 to 10:30)-Scrum meetings(Includes interviews)

(10:30 to 12:30/13:00)-Class

(14:00 to 16:00)-Assignments.

(16:00 to 17:00)-code reviews and home works for next day.

Every week Friday surprise tests.