

Core Java

1. INTRODUCTION

2. OOPS

3. STRING MANIPULATIONS

4. PACKAGES

5. EXCEPTION HANDLING

6. MULTITHREADING

7. I/O STREAMS

8. COLLECTION FRAME WORK

Advanced Java

I.JDBC

II.SERVLETS

III.JSP

IV.IDE

V.SERVERS

IOC: (Inversion of Control)

1) Bean

2) Import

3) Aliasing beans

4) Bean Scopes

5) Autowiring collaborators

AOP(Asspect Oriented Programming):

Data access using JDBC:

Object Relational Mapping (ORM) data access: (Integrating Hibernate with Spring)

Spring MVC:

Hibernate

- **Advantages of Hibernate compared to JDBC**
- **Hibernate architecture**

- **Configuration xml file and mapping xml file along with dtDs**
- **ORM (Object Relational Mapping)**
- **Inheritance**
- **Relations**
(one to one, one to many, many to one, many to many)
- **Set, list, bag, array, map in mapping xml file**
- **HQL (Hibernate Query Language)**
- **Criteria**
- **Restrictions**
- **Order**
- **Expressions**
- **Projections**
- **Declaring functions, stored procedures in hibernate mapping xml file.**
- **Declaring select queries of HQL in mapping xml file in different ways**
- **Writing Database specific queries using Session Object**

WebServices

Java Web Services and technologies

- **WSDL**
- **SOAP**
- **UDDI**
- **CLIENT DESIGN**
- **REST Ful Web Services.**