

Annexure - II

Syllabus of CCSD-Java

Objective: This course is designed to impart software development training programme IT aspirants. After completing the course the incumbent is able to do the software development using object oriented methodologies and various programming languages. This course is more practical oriented. After completion of course the candidates will be able to get employment as Software Developer and Programmer in IT industries. It consists of following four modules:

Module 1

Programming in Java and J2EE

Module 2

DBMS Packages

Module-1: Programming in Java and J2EE

1. Core Java:

- a. Overview of Java, Data types, variables and Arrays, Operators, Control statement
- b. Classes, Methods
- c. Inheritance, Packages and Interfaces
- d. Exception Handling
- e. Multi threaded Programming
- f. I/O, Applets
- g. String Handling
- h. Exploring Java.Lang
- i. Network Programming

2. Java GUI Development

- j. Java AWT
- k. Applets Classes
- l. Event Handling
- m. Graphics
- n. Swing

3. **J2EE**

- o. Introduction to J2EE
- p. JDBC
- g. RMI, Jar, WAR
- r. JSP, JSTL, servlets
- s. Java Beans

Module-2: DBMS Packages

1. Database Management System:

Types of Database, DBMS Elements, Constraints, Relationships, E-R Diagram, Normalization, First Normal Form, Second Normal Form, Third Normal Form, BCNF, Locking, Database security & Backup.

2. Oracle

Introduction to Oracle, SQL*Plus, Query: Create Table, Insert, Select, Alter, Drop, Delete, Update, Joins, Nested Query, View, index, Sequences, SQL Built in Functions, PL SQL; Trigger, Cursor, Procedure, Function, Database permissions.