Course: B. Tech (CSE) Year: II Subject: Object Oriented Programming (CSE4104) Topics and sub-topics to be covered in Module I under Java Fundamentals	
Introduction to Java	Internals of Java Program, Difference between JDK, JRE and JVM, Internal Details of JVM, Variable and Data Types, Unicode System, Naming Convention
Features	All Features of Java such as Platform Independence, Multithreaded, Robust, Reliable, Secure, etc.
Objects	Concept of Object and Encapsulation
Methods and Classes	Concept of class, defining a class, Class variables V/s Instance Variables V/s Local Variables, Defining and calling user-defined methods within a class; Access Modifiers: public, private, default, protected; static keyword (variable, method, block, package, class), final keyword, etc.
Constructors	Default Constructors, Parameterized Constructors, Constructor Overloading, Calling a contructor using this keyword, calling constructor of parent class using super keyword, etc.
Abstract Classes	Concept of Abstract class, Abstract methods, inheriting an Abstract class, Difference between Abstract and non-abstract (concrete) class, etc.
Polymorphism	Concept of Poymorphism, Method overloading, Compile time and Run-time Polymorphism, etc.
Inheritance	Concept of Inheritance, Use of extends keyword, Using access modifiers in Inheriting a class, Types of Inheritances, Method overriding, Use of final keyword in inheritance, Concept of multiple Inheritance using interfaces, abstract class and its use
Packages	Some predefined packages like lang, util, math, io; importing a package; creating a user-defined package; use of public access specifier w.r.t. a package, Compiling a complete package at once.