**Unit 1 – Environment**

IDE – Integrated Development Environment

Code Editor/Debugger

Console/Terminal

API

**Unit 2 – Fundamentals**

Primitive Datatypes

Objects

Variables

Input/Output

Conditionals

Loops

**Unit 3 – Arrays**

Declaration

Initialization

Index notation

Accessing array elements

Modifying array elements

Array traversal using loops

Sequential Search

Selection Sort

**Unit 4 – Strings**

Declaration

Initialization

String methods

substring

indexOf

length

compareTo

contains

**Unit 5 – Object Class**

Class model

Private instance variables a.k.a ‘fields’

Constructors

Methods

Setters/getters

toString method

Overloading constructors/methods

**Unit 6 – Class Composition**

ArrayLists

Passing objects as arguments

Complex class structure

“has a” relationship

**Unit 7 – Polymorhism**

Inheritance

“Is a” relationship

Sub class

Super class

Overriding methods

Interfaces

“does a” relationship

Abstract classes

Abstract methods