

ITM(SLS) Baroda University
School of Computer Science, Engineering and Technology
B.Tech - Semester III

Course Name :Object Oriented Programming with Java
Course Code:C2310C1
Course Type: Core

Unit-1 :

Basics of Java: Features of Java, Byte Code and Java Virtual Machine, JDK, Data types, Operator, Control Statements –If , else, nested if, if-else ladders, Switchwhile, do-while, for, for-each, break, continue.
Array and String: Single and Multidimensional Array, String class, StringBufferclass, Operations on string, Command line argument, Use of Wrapper Class.

Unit 2 :

Classes, Objects and Methods: Class, Object, Object reference, Constructor, Constructor Overloading, Method Overloading, Recursion, Passing and Returning object form Method, new operator, this and static keyword,

Unit 3:

Inheritance and Interfaces: Use of Inheritance, Inheriting Data members and Methods, constructor in inheritance, Multilevel Inheritance –method overriding Handle multilevel constructors –super keyword, Stop Inheritance -Final keywords, Creation and Implementation of an interface, Interface reference, instanceof operator, Interface inheritance, Dynamic method dispatch , Comparison between Abstract Class and interface.

Unit 4:

Exception Handling: Exception and Error, Use of try, catch, throw, throws and finally, Built in Exception, Custom exception, Throwable Class.
