## SARDAR PATEL UNIVERSITY

## Vallabh Vidyanagar

## B.C.A. Semester - V

**US05CBCA25**: Object Oriented Programming –III

(Syllabus Effective from June 2020)

Credits : 4 External : 70 Marks

Contact Hrs per Week : 4 University Examination Duration: 3 Hrs

All units carry equal weightage

Unit	Description in detail
I	JDBC & Collection Frame work
	Basic JDBC program Concept
	Architecture of JDBC
	Making the Connection, Statement & its types
	Executing queries
	List Interface (Array List, Vector List, Iterator)
	Wrapper Class (Integer, Float and Double) and Methods
II	Servlet
	Introduction
	Types of servlet
	Life cycle of servlet
	Execution process of Servlet Application
	Session Tracking
	Cookie Management
III	JSP
	Introduction to JSP and Lifecycle
	Components of JSP
	Directives, Tags, Scripting Elements
	Execution process of JSP Application
	Building a simple application using JSP
IV	Multithreading
	Introduction
	Thread Life Cycle
	Creating Thread
	Thread Methods
	Thread Synchronization

## **Basic Text & Reference Books:-**

- 1. The Complete Reference JAVA Herbert Schildt
- 2. Core java -II By Cay S. Horstmann and Gary Cornell
- 3. Compete Reference J2EE Jim Keogh
- 4. Programming with Java- A Primer by E. Balaguruswami, 3rd Edition, TMH Publication