

Rajarshi Shahu Mahavidyalaya, Latur

(Autonomous)

Teaching Plan (Semester-II)

(Dec - 2019 to March-2020)

1. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B. Sc. SY	S. K. Kasbe	Computer Science	U-COS-444 Programming in JAVA	45
2	M. Sc. FY	S. K. Kasbe	Computer Science	P-CD-205 Compiler Design	60
3	M. Sc. SY	S. K. Kasbe	Computer Science	M.Sc.CS-CC-10 Advance Java Programming	60

2. Summary of Lesson Plan

Subject : Programming in Java

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Duration	
			From	To
1	UNIT- I: An Introduction to Java A Short History of Java Features of Java, Difference between Java and C++, Java virtual machine (JVM) Java program structure, Java statement.	06	09.12.2019	18.12.2019
	Types of Comments, Keywords, Data Types., Variables and	08	23.12.2018	8.12.2018

	<p>Constants, Operators Output using println() method Simple Java Program, Command Line Arguments.</p>			
2	<p>Unit - II: Decision Making, Branching, Looping and Classes, Object and Methods Decision making with if statement, Simple if statement, if...else statement, Nesting of if...else Switch statement, while statement, do statement, for statement. Introduction, defining a class, Adding variables, Adding Methods, Accessing Class Members Constructors and Method Overloading Static Member Inheritance: Extending a class, Overriding Method</p>	<p>08</p> <p>05</p>	<p>13.01.2020</p> <p>3.02.2020</p>	<p>29.01.2020</p> <p>12.02.2020</p>
3	<p>Unit -III: Arrays. Strings, Vectors and Creating and Using Packages Introduction, One-dimensional Arrays, Creating an one</p>	<p>06</p>	<p>17.02.2020</p>	<p>26.02.2020</p>

	<p>dimensional array, Two-dimensional Arrays, Creating an two dimensional array, String Arrays, String Method</p> <p>Introduction, Java API package, Using system packages, Naming Conventions, Creating Packages, Accessing a package, Using a Package, Adding a class to a package.</p>	06	02.03.2020 to	16.02.2020
4	<p>Unit - IV: Exception Handling and Applet Programming</p> <p>Dealing Errors, Catching exception and exception handling, creating user defined exception.</p> <p>Applet Life Cycle, Applet HTML Tags, Passing parameters to Applet, Repaint() and Update() method</p>	05	16.02.2020	18.03.2020
		05	23.03.2020	31.03.2020

Subject : Compiler Design

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Duration	
			From	To
1	UNIT I: Introduction to Compilers and Programming Languages: Compilers and translators, The structure of compiler, Compiler writing tools, Definition of P.L., High level Programming Languages., Lexical and syntactic structure of a language , Data structures, Operators, Statements, Lexical Analysis: Introduction to Lexical analysis,	12	9.12.2019	21.12.2019
		10	23.12.2019	4.1.2020
2	UNIT II: Syntax analysis and basic parsing techniques Role of a Lexical analyzer, A simple approach to the design of lexical analyzer, Regular expressions Finite automata, minimizing number of states of a DFA, Implementation of a lexical analyzer Context free grammars, Introduction to parsers, Shift reduce parsing, Top down parsing, Operator Precedence parsing, Predictive parsers	12	6.1.2020	18.01.2020
		10	20.01.2020	31.01.2020

Subject : Advance Java Programming

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Duration	
			From	To
1	Unit I Exception Handling and Collection Framework Exception Handling: What is Exception, Exception arguments, catching an exception, The try block, Exception handlers, The exception specification, catching any exception, , Standard Java exceptions, Performing cleanup with finally. Collections: Collections interfaces, Concrete Collections (Linked lists, Array List, Hash sets, Tree sets, Maps) The Collections framework.	10	9.12.2019	19.12.2019
		10	20.12.2019	31.12.2020
2	Unit II Multithreading and Networking Multithreading: What are Threads, Interrupting Threads, Thread properties, creating Threads, Threads priorities, Threads groups, Threads synchronization, inter- Thread communication, deadlock Networking: Identifying a machine, connecting to a server using Socket object, ImplementingServer programs using ServerSocket object, serving multiple of clients.	10	6.1.2020	23.01.2020
		10	24.01.2020	4.02.2020
3	Unit III GUI Programming, Event Handling GUI Programming Designing: Graphical User Interfaces in Java, Components and Containers, Basics of	10	05.02.2020	15.02.2020

	<p>Components, Using Containers, Layout Managers ,AWT Components,Adding a Menu to Window, Extending GUI Features Using Swing Components</p> <p>Event handling: Event-Driven Programming in Java, Event- Handling Process, Event-Handling Mechanism, The Delegation Model of Event Handling, Event Classes, Event Sources, Event Listeners, Adapter Classes as Helper Classes in Event Handling.</p> <p>Java Database Connectivity: JDBC Architectures, JDBC Drivers, JDBC API, opening a database connection, Creating Statement & Prepared Statements, executing SQL Queries, Operating ResultSets. Scrollable & Updatable Resultset, Accessing Database Metadata, ResultSetMetadata, Transactions</p>	06	17.02.2020	23.02.2020
		06	24.02.2020	29.02.2020
4	<p>Unit IV Servlets & JSP</p> <p>Servlet: The Basic Servlet, Life cycle of servlet, servlet development options, The javax.servlet packages, Handling GET and POST Request.</p> <p>Getting started with Java Server Pages: Dynamic Page Creation for Data Presentation, Generalized Templating and server scripting, JSP Tag Libraries and JSTL, JSP Directives, JSP standard actions, JSP and Servlet</p> <p>JavaBeans: What is Java Beans, Advantages of Java Beans, Introspection, Persistence.</p>	06	12.03.2020	18.03.2020
		11	19.03.2020	31.03.2018