

Rajarshi Shahu Mahavidyalaya (Autonomous), Latur

Department of Computer Science

Teaching Plan (Semester-I, III, V)

(July – 2021 to Dec - 2021)

1. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lectures:
1	B. Voc. (CT)SY	Suchitra K. Kasbe	Computer Technology	U-OOP-431 Object Oriented Programming through C++	60
2	B. Voc. (CT) TY	Suchitra K. Kasbe	Computer Technology	U-FOSS-660 Free and Open Source Software	60
3	B. Voc. (CT) TY	Suchitra K. Kasbe	Computer Technology	U-MAP-663 Mobile Application Development	60
4	M..Sc. (CS) SY	Mrs. S. K. Kasbe	Computer Science	P-LIA-329 Linux Administration	60

Course Title: Object Oriented Programming through C++

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit-I : Introduction to OOPs and Basics of C++ Need object-oriented programming comparison of procedural and object- oriented approach object classes polymorphism inheritance reusability data hiding and abstraction applications of OOPs Character Set, identifiers and keywords, data types, constants, variables and arrays, Operators and Expressions, Conditional Statements and Loops, Switch Statement	<div>10</div> <div>10</div>	<div>07.07.2021 To 23 .07.2021</div> <div>24.07.2021 To 11.08.2021</div>	PPT presentation for basic concepts of OOP	--

2	Unit-II: Functions, Classes and Objects defining a function accessing a function Passing arguments to a function specifying argument data types function prototypes recursion Class declaration constructors constructor initialization lists access functions private member functions the copy constructor the class destructor pointers to object static data members static function members friend function Operator Overloading overloading the assignment operator the this pointer overloading arithmetic operators overloading the arithmetic assignment operators overloading the relational operators overloading the increment and decrement operators overloading the subscript operator	10
---	--	--

	Classes for file stream operations opening and closing a file detecting end of file file modes file pointers and their manipulations sequential input and output operations random access file operations error handling command line arguments	05	01.10.2021 To 13.10.2021		
4	Unit-IV: Templates and Exception Handling function templates class templates container classes subclass templates passing template classes to template parameters Exception Handling Introduction Exception Handling Mechanism Concept of throw & catch with example	05 05	14.10.2021 To 23.10.2021 27.10.2021 To 02.11.2021	Class test	Unit Test II

Course Title: Free and Open Source Software

[illegible]

3	UNIT- III Google Drive: Introduction, create an Google Docs: Document, Formatting , Using a Dictionary, Thesaurus, or Encyclopedia, Taking Your Docs to the Next Level: Lists, Tables, Editing Images, Creating a Table of Contents, , Choose Sharers and Set Permissions Google Sheets: Google Forms: , Multiple Choice, Checkboxes, Dropdown, File Upload, Linear Scale, Multiple Choice Grid, Checkbox Grid, Date and Time. Form and Question Setting, Response Validation Changing Color and Backgrounds, Viewing Responses	07	03.09.2021 To 20.09.2021	Create Google account and use Google Products	--
4	Unit: IV Google Scholar: Google sites: Google Slides: Introduction to OBS: Introduction, OBS Interface, OBS Setting, Creating a video.	08	08.10.2021 To 23.10.2021	To create own video and update using OBS studio	Unit Test II
		07	21.09.2021 To 28.09.2021		
		04	01.10.2021 To 5.10.2021		

Course Title: Mobile Application Development

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit I: Introduction Introduction to Mobile Programming, Overview of the Operating Systems used on different mobile devices, Introduction to Android Android History Android Features and Versions, Various IDE for Android,	07 08	05.07.2021 To 15.07.2021 19.07.2021 To 03.08.2021	Identify the versions of android studio	--
2	Unit II: Android Architecture Linux Kernal, Dalvik Virtual Machine, Android Stack, Android applications structure, Creating a project, Working with the AndroidManifest.xml, Using the log system, Activities.	08 07	04.08.2021 To 18.08.2021 23.08.2021 To 02.09.2021	Create the project and observe the working of Androidmanifest.xml file	Unit Test-I
3	Unit III: User Interface(UI) Architecture Application context, Intents,Activity life cycle, Supporting multiple screen sizes, Android Components, Android Application Structure,call Back Methods	07 08	07.09.2021 To 20.09.2021 21.09.2021 To 05.10.2021	--	--

4	Unit IV User Interface Widgets Text controls, Button controls, Toggle buttons, Images, Notification and Toast- Parameters on Intents, Pending intents, Status bar notifications, Toast notifications	07 08	06.10.2021 To 18.10.2021 20.10.2021 To 02.11.2021	Create a simple application using different controls	Unit Test II
---	--	----------------------------------	--	--	--------------


Course Title: Linux Administration


Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit-I Introduction to Linux and Linux Files and Directories Introducing Linux, Installing Red Hat Linux, Features of Linux, Basic Architecture of Linux system, features of Kernel and Shell. Linux File System - Boot block, Super block and Data blocks, how Unix/Linux kernel access files. The shell Scripts, Linux standard file system, Structure of file system, Essential Linux commands Listing, Displaying, and Printing Files Displaying Files: cat, less and more, Printing Files: lpr, lpq, and lprm Managing Directories: mkdir, rmdir, ls, cd, and pwd File and Directory Operations: find, cp, mv, rm, and ln Archiving and compressing files Filters and pipes: head, tail, wc, pr, cut, paste, sort, uniq, grep, egrep, fgrep, tee	07	05.07.2021 To 15.07.2021	PPT presentation on directory structure and commands	--
		08	16.07.2021 To 31.07.2021		

4	UNIT IV: Network Connectivity and Managing DNS Networking with TCP/IP , Network Organization, Hardware Devices for Networking , Using Network Configuration Tools , Dynamic Host Configuration Protocol , Using the Network File System, Putting Samba to work Managing DNS Configuring DNS, Essential DNS concept Overview of DNS Tools, Configuring Name servers with BIND, providing DNS for Real Domain.	07	28.09.2021 To 18.10.2021	PPT presentation on Network connectivity	Unit Test II
		08	20.10.2021 To 02.11.2021		


Suchitra K. Kasbe

Name & Signature of Teacher


HoD
Head
Dept. of Computer Science
Rajarshi Shahu Mahavidyalaya, Latur


Principal
PRINCIPAL
Rajarshi Shahu Mahavidyalaya, Latur
(Autonomous)

Rajarshi Shahu Mahavidyalaya (Autonomous), Latur

Department of Computer Science

Teaching Plan (Semester-II, IV, VI)

(Dec - 2021 to April -2022)

1. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lectures:
1	M. Sc. (C.S)SY	Suchitra K. Kasbe	Computer Science	P-SFC-428 Soft Computing	60
2	B. Sc. SY	Suchitra K. Kasbe	Computer Science	U-COS-443 Programming in Java	45
3	B. Voc. (CT) SY	Suchitra K. Kasbe	Computer Technology	U_PRJ_527 Java Programming	60

Course Title: Soft Computing

Sr. No.	Unit and Chapter to be covered	ExpectedNo. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	<p>Crisp Sets: An Overview, Fuzzy Sets: Basic Types, Fuzzy Sets: Basic Concepts, Fuzzy Sets Vs Crisp Sets, Additional Properties of alpha cuts, Presentation of fuzzy sets, Extension principle for fuzzy sets.</p> <p>Operations on fuzzy sets</p> <p>Fuzzy complements, Fuzzy Union, Fuzzy Intersections, Crisp & Fuzzy Relation, Binary Fuzzy Relation, Binary Relation on single set, Fuzzy Equivalence</p>	<p>10</p> <p>05</p>	<p>17.12.2021 To 28.12.2021</p> <p>29.12.2021 To 03.01.2022</p>	<p>PPT representationfor Operationsof Fuzzy Sets</p>	

2	<p>UNIT II Introduction to Neural Networks</p> <p>Introduction to Neural Networks Biological Neuron and their Artificial Neuron, McCulloch-Pits Neuron Model, Perceptron Classification, Linearly Separability, NOR Problem, Overview of Neural Network Architecture, Learning Rules-Supervised Learning Unsupervised Learning - Perceptron Learning-Reinforcement Learning -Delta Learning Rule</p>	<p>10</p> <p>05</p>	<p>04.01.2022 To 15.01.2022</p> <p>17.01.2022 To 22.01.2022</p>	Assignment	Unit Test-I
3	<p>UNIT III: Multilayer Feed forward Network</p> <p>Generalized Delta Learning, Back propagations training algorithm and derivation of weight, Variant in Back propagations, Radial Basis Function(RBF), Application of BP and RBFN/W</p>	<p>10</p> <p>05</p>	<p>24.01.2022 To 05.02.2022</p> <p>07.02.2022 To 12.02.2022</p>	PPT Presentation Back Propagation algorithm	
4	<p>UNIT IV: Recurrent Network and Neuro Fuzzy System</p> <p>Hopfield Network, Counter propagation networks, Boltzmann Machine, Adaptive Resonance theory (ART). Fuzzy System, Neuro Fuzzy System and Applications Fuzzy neurons, Fuzzy Neural Network, Fuzzy associative memory, Application in Pattern</p>	<p>10</p> <p>05</p>	<p>14.02.2022 To 25.02.2022</p> <p>26.02.2022 To 05.03.2022</p>		Unit Test II

	Recognition, Character, Face, Finger, Palm, Iris Recognitions, Application in Expert System Revision seminar		07.03.2022 To 30.03.2022 01.04.2022 To 16.04.2022	Class test	
--	--	--	---	------------	--

Course Title: Programming in Java

Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	UNIT- I: An Introduction to Java Introduction to Object Oriented Programming, Basic concepts of OOPs, A Short History of Java, Features of Java, Difference between Java and C++, Java virtual machine (JVM), Java program structure, Java statement , Command Line Arguments.	06 06	20.12.2021 To 29.12.2021 03.01.2022 To 12.01.2022	PPT Presentation on Features of Java	--
2	Unit – II: Decision Making, Branching, Looping and Classes, Object and Methods Decision making statement, Simple if statement, if...else statement, Nesting of if...else, Switch statement, while statement, do statement, for statement. Introduction, defining a class,	06 07	17.01.2022 To 31.01.2022 01.02.2022 To 21.02.2022	Program Assignments	Unit Test-I

3	Unit –III: Arrays. Strings, Vectors and Creating and Using Packages				
	Introduction, One-dimensional Arrays: Creating an one dimensional array, Two-dimensional Arrays: Creating an two dimensional array, String Arrays, String Method	05	22.02.2022 To 02.03.222		
		05	07.03.2022 To 15.03.2022	Assignment on packages	--
4	Unit – IV: Exception Handling and Applet Programming				Unit Test II
	Dealing Errors, Catching exception and exception handling, create user defined exception. Applet Life Cycle, Applet HTML Tags, Passing parameters toApplet, repaint() and update()	05	16.03.2022 To 30.03.2022		
		05	31.03.2022 To 13.04.2022	Assignment on Exception handling	


Course Title: Java Programming


Sr. No.	Unit and Chapter to be covered	Expected No. of Lectures	Date	Academic activities to be organized	No. of Test / Assignment with topic and date
1	Unit 1: Introduction to Java programming History of Java, Features ofJava, Java Development Kit(JDK), Keywords, Comments, Data Types in Java, Primitive Data Types;Variables in Java; The main() Method of java, Arrays and Strings Arrays; Strings, String Operations, String Buffer.	07 08	17.12.2021 To 29.12.2021 30.12.2021 To 12.01.2022	Program Assignments on control statements and looping statements	--
2	Unit 2 : Object Oriented Concepts Class and Objects Class Fundamentals, Creating objects, Assigning object reference variables, Introducing Methods, Static methods, Garbage Collection, The Finalize() Method Inheritance and Polymorphism: Inheritance Basics, Method Overriding, Abstract Classes, Polymorphism, Final Keyword	08 07	13.01.2022 To 27.01.2022 28.01.2022 To 10.02.2022	Program Assignments on Polymorphism and inheritance	Unit Test-I

3	Unit 3: Package, Interface and Exception Handling Packages Packages, Defining and using a Package ,Interface Interface,Exception Handling Definition of an Exception, Exception Classes, Common Exceptions, Exception Handling Techniques	07	11.02.2022 To 24.02.2022		
		08	25.02.2022 To 11.03.2022	Assignments on packages	--
4	Unit 4: Applets, Event Handling, Swing, JDBC Applets What are Applets? The Applet Class, Life Cycle of an Applet Event Handling Components of an Event, Event Classes, Event	7	12.03.2022 To 25.03.2022	Assignments on Swing programs	Unit Test II
		8	26.03.2022 To 16.04.2022		


 Suchitra K. Kasbe

Name & Signature of Teacher


HoD
Head
Dept. of Computer Science
Rajarshi Shahu Mahavidyalaya, Latur


Principal
PRINCIPAL
Rajarshi Shahu Mahavidyalaya, Latur
(Autonomous)