

**Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur**

**Teaching Plan (Semester-II)**

**(March-2021- to June-2021)**

**1. Details of Classes to be taught**

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B. Voc. FY	A. B. Kumbhar	Computer Technology	U-ADT-316 Analysis, Design and Testing of Web based Applications	60

Sr. No	Unit and Chapter to be covered	Date	Expected No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
1	<b>Unit-I : Software Development Models</b>  Defining Software, Software Application Domains, The Unique Nature of WebApps, Software Engineering, The Software Process, Software Engineering Practice, A Generic Process Model, defining a Framework Activity, Identifying a Task Set, Process Patterns, Process Assessment and Improvement. The Waterfall Model, Incremental Process Models, Evolutionary Process Models, Concurrent Models, Understanding Requirements: Requirements Engineering, Establishing the Groundwork, Identifying Stakeholders Recognizing Multiple Viewpoints, working toward Collaboration, Asking the First Questions, Eliciting Requirements, Developing Use Cases, Building the Requirements Model, Analysis Patterns, Negotiating Requirements, Validating Requirements.	10.03.2021 To 21.03.2021	15	PPT representation for array operations	
		25.03.2021 To 05.04.2021			
		08.04.2021 To 15.04.2021			

2	<b>Unit-II: Requirement Modeling: Flow, Behavior, Patterns and Webapps</b>  Requirements Modeling Strategies, Flow-Oriented, Modeling, creating a Data Flow Model, creating a Behavioral Model, Patterns for Requirements Modeling, Requirements Modeling for WebApps. How Much Analysis Is Enough? Requirements Modeling Input Requirements Modeling, Output Content Model for WebApps, Interaction Model for WebApps, Functional Model for WebApps, Configuration Models for WebApps Navigation Modeling. Design within the Context of Software Engineering, The Design Process, Software Quality Guidelines and Attributes Design Concepts, The Design Model, Data Design Elements, Architectural Design Elements, Interface Design Elements, Component-Level Design Elements, Deployment-Level D	16.04.2021 To 22.04.2021	20	PPT representat ion for array operations	
		23.04.2021 To 03.05.2021			
		04.05.2021 To 11.05.2021			
3	<b>Unit-III: Web Application Testing</b>  Starting on Web Testing Testing HTML—The Static Web The Dynamic Web Testing Character Sets, Code Pages, and Glyphs Performance Testing Security Testing	12.05.2021 To 15.05.2021	15	PPT representat ion for array operations	
		17.05.2021 To 20.05.2021			
		21.05.2021To			

		22.05.2021			
--	--	------------	--	--	--



4	<b>Unit-IV: Learning and Self Development</b> <ul style="list-style-type: none"> <li>I: Importance of Self Development</li> <li>II: Knowledge and Skills Required for the Job</li> <li>III: Avenues of Self Development</li> <li>IV: Planning for Self-Development</li> </ul>	24.05.2021 To 26.05.2021	10	PPT representat ion for array operations	
		27.05.2021 To 31.05.2021			
		01.06.2021 To 03.06.2021			



**Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur**

**Teaching Plan (Semester-I)**

**(January-2021- to March-2021)**

**1. Details of Classes to be taught**

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	M.Sc. (CS) F.Y	A. B. Kumbhar	Computer Science	U-ADT-316 Object Oriented Programming using Python	60

Sr. No.	Unit and Chapter to be covered	Date	Expected No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
1	<b>Unit-I Introduction to Python</b> Installation and Working with Python, Understanding Python variables, Python basic Operators, Understanding python blocks, Declaring and using Numeric data types: int, float, complex, Using string data type and string operations, Defining list and list slicing, Use of Tuple data type, Conditional blocks using if, else and elif, Simple for loops in python, For loop using ranges, string, list and dictionaries, Use of while loops in python, Loop manipulation using pass, continue, break and else, Programming using Python conditional and loops block	01.01.2021 To 06.01.2021 07.01.2021 To 12.01.2021 13.01.2021 To 18.01.2021	<b>15</b>	PPT representation for array operations	

2	<b>Unit- II Python Functions, Modules and Packages</b> Organizing python codes using functions, organizing python projects into modules, importing own module as well as external modules, Understanding Packages, Powerful Lambda function in python, Programming using functions, modules and external packages, building blocks of python programs, understanding string in built methods, List manipulation using in built methods, Dictionary manipulation, Programming using string, list and dictionary in built functions.	19.01.2021 To 22.01.2021	15	PPT representation for array operations	
		23.01.2021 To 29.01.2021			
		30.01.2021 To 05.02.2021			
3	Unit III Python File Operation and OOPs Reading config files in python, Writing log files in python, Understanding read functions, read(), readline() and readlines(), Understanding write functions, write() and writelines(), Manipulating file pointer using seek, Programming using file operations, Concept of class, object and instances, Constructor, class attributes and destructors, Real time use of class in live projects inheritance, overloading and overloading operators, Adding and retrieving dynamic attributes of classes, Programming using OOPs support.	06.02.2021 To 10.02.2021	15	PPT representation for array operations	
		11.02.2021 To 13.02.2021			
		15.02.2021 To 23.02.2020			
4	<b>Unit: IV : Python Regular Expression, Exception Handling &amp; Database Interaction</b> Powerful pattern matching and searching, Power of pattern searching using regex in python, Real time parsing of networking or system data using regex, Password, email, url	24.02.2021 To 05.03.2021		PPT representation for array operations	



	validation using regular expression, Pattern finding programs using regular expression, Avoiding code break using exception handling, Safe guarding file operation using exception handling, Handling and helping developer with error code, Programming using Exception handling, SQL Database connection using python, Creating and searching tables, Reading and storing config information on database, Programming using database connections.	08.03.2021 To 17.03.2021	15		
		18.03.2021 To 30.03.2021			



**Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur**

**Teaching Plan (Semester-II)**

**(March-2021- to June-2021)**

**1. Details of Classes to be taught**

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	M.Sc. (CS) S.Y	A. B. Kumbhar	Computer Science	P-AJP-427 Advance Java Programming	60

Sr. No.	Unit and Chapter to be covered	Date	Expected No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
1	<b>Unit I Introduction and Object-Oriented Programming</b> Programming language Types and Paradigms, Computer Programming Hierarchy, How Computer Architecture Affects a Language? Why Java? Flavors of Java, Java Designing Goal, Role of Java Programmer in Industry, Features of Java Language, JVM –The heart of Java, Java’s Magic Byte code. Installing Java, Java Program Development, Java Source File Structure, Compilation, Executions. <b>Object Oriented Programming</b> Class Fundamentals, Object & Object reference, Object Life time & Garbage Collection, Creating and Operating Objects, Constructor & initialization code block, Access Control, Modifiers, methods Nested, Inner Class & Anonymous Classes, Abstract Class & Interfaces Defining Methods, Argument Passing Mechanism, Method Overloading, Recursion, Dealing with Static Members, Finalize () Method, Native Method.	10.04.2021 To 17.04.2021  19.04.2021 To 23.04.2021  24.04.2021 To 02.05.2021	15	PPT representation for array operations	



2	<b>Unit II Extending Classes Inheritance and Packages</b> Use and Benefits of Inheritance in OOP, Types of Inheritance in Java, Inheriting Data members and Methods, Role of Constructors in inheritance, Overriding Super Class Methods, Use of “super”	03.05.2021 To 11.05.2021	15	PPT represent ation for array operation s	
	<b>Package</b> Organizing Classes and Interfaces in Packages, Package as Access Protection, Defining Package, CLASSPATH Setting for Packages, Naming Convention For Packages.	12.05.2021 To 22.05.2021			
3	<b>Unit III: Exception Handling, Thread and GUI Programming</b> <b>Exception Handling</b> The Idea behind Exception, Exceptions & Errors, Types of Exception, Control Flow in Exceptions, JVM reaction to Exceptions, use of try, catch, finally, throw, throws in Exception Handling, In-built and User Defined Exceptions, Checked and Un-Checked Exceptions. Understanding Threads, Needs of Multi-Threaded Programming, Thread Life-Cycle, Thread Priorities, Synchronizing Threads, Inter Communication of Threads, Critical Factor in Thread –Dead Locks Designing Graphical User Interfaces in Java, Components and Containers, Basics of Components, Using Containers, Layout Managers, AWT Components, Adding a Menu to Window, Extending GUI Features Using Swing Components, Java Utilities (java.util Package) The Collection Framework: Collections of Objects, Collection Types, Sets, Sequence, Map, Understanding Hashing, Use of ArrayList & Vector	24.05.2021 To 28.05.2021	15	PPT represent ation for array operation s	
		29.05.2021 To 04.06.2021			
		05.06.2021 To 10.06.2021			
	<b>Unit IV Event Handling, JDBC and Servlets</b> Event-Driven Programming in Java, Event- Handling Process, Event- Handling Mechanism, The Delegation Model of Event Handling,	11.06.2021 To 16.06.2021			

4	Event Classes, Event Sources, Event Listeners, Adapter Classes as Helper Classes in Event Handling.		15	PPT represent ation for array operation s	
	Introduction to JDBC, JDBC Drivers & Architecture, CURD operation Using JDBC, Connecting to non-conventional Databases. Java Server Technologies Servlet Web Application Basics, Architecture and challenges of Web Application, Introduction to servlet, Servlet life cycle, Developing and Deploying Servlets, Exploring Deployment, Descriptor (web.xml), Handling Request and Response.	17.06.2021 To 21.06.2021			
		22.06.2021 To 26.06.2021			



**Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur**

**Teaching Plan (Semester-VI)**

**(March-2021- to June-2021)**

**1. Details of Classes to be taught**

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B.Sc T.Y.	A. B. Kumbhar	Computer Science	U-COS-641 Web Programming using PHP and MySQL	60

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	<b>UNIT I: PHP Basic and Programming Constructs.</b> HTTP basics, Introduction to Web server and Web browser, Introduction to PHP, advantages of PHP. PHP syntax, Variables, Constants, print/Echo Data types, Strings, Constants, while, For, Operators and Expressions, if-else, else if, Switch statement, Break and Continue...	22.02.2021 To 24.02.2021	13	PPT representation for array operations	
		25.02.2021 To 02.03.2021			
		03.03.2021 To 08.03.2021			

2	<b>UNIT II: Function &amp; Arrays</b> Defining and calling a function, Default parameters, Variable parameters, Variable function, Types of strings in PHP, printing functions, Encoding and escaping, comparing strings, Manipulating and searching strings, Regular expressions, Indexed Vs Associative arrays, Multidimensional arrays, converting between arrays and variables, traversing arrays, using arrays, Functions: count, list, in array, current, next, previous, end, each, sort, rsort, assort, array merge, array reverse.	09.03.2021 To 16.03.2021	10	PPT representation for array operations	
		17.03.2021 To 24.03.2021			
		29.03.2021 To 30.03.2021			
3	<b>UNIT III: OOPs and Forms</b> Classes, Objects, Serialization, Inheritance, Interfaces, Encapsulation. FORM element, INPUT elements, validating user input, passing variables between pages, passing variables through a GET, passing variables through a POST, Passing variables through a REQUEST, MVC Architecture.	31.03.2021 To 06.04.2021	12	PPT representation for array operations	
		07.04.2021 To 13.04.2021			
		14.04.2021 To 20.04.2021			
4	<b>UNIT IV: My SQL</b> Introduction to MySql , Benefits of MySql, reserve words, key words, variables, data types, Types of commands : Data Definition Commands, Data Manipulation Commands, Data Control Commands Clauses : where , order by , group by , having, like , between, Connectivity withPHP.	21.04.2021 To 27.04.2021	10	PPT representation for array operations	
		28.04.2021 To 05.05.2021			
		10.05.2021 To 15.05.2021			



**Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur**

**Teaching Plan (Semester-II)**

**(January-2021- to March-2021)**

**1. Details of Classes to be taught**

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	M.Sc. (CS). S.Y.	A. B. Kumbhar	Computer Science	P-WPD-328 Web Application Development using PHP	60

Sr. No.	Unit and Chapter to be covered	Date	Expected No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
1	<b>Unit I: Introduction and PHP Basics</b> Introduction to web techniques HTTP basics, Introduction to Web server and Web browser, Introduction to PHP, what does PHP do? Function and String: Defining and calling a function, Default parameters, Variable parameters, Missing parameters, Variable function, Anonymous function, Types of strings in PHP, printing functions, Encoding.	01.01.2021 To 06.01.2021	15	PPT representation for array operations	
		07.01.2021 To 11.01.2021			
		13.01.2021 To 19.01.2021			



2	<b>Unit II: Working with Data, Arrays and Object-Oriented Programming</b> <b>Arrays:</b> Indexed Vs Associative arrays, identifying elements of an array, storing data in arrays, Multidimensional arrays, extracting multiple values, Converting between arrays and variables <b>Introduction to Object Oriented Programming:</b> Classes, Objects, Serialization, Inheritance Interfaces, Encapsulation <b>Working with Data:</b> FORM element, INPUT elements, validating user input, passing variables between pages, passing variables through a GET, passing variables through a POST, Passing variables through a REQUEST, MVC Architecture.	20.01.2021 To 23.01.2021	15	PPT representatio n for array operations	
		25.01.2021 To 29.01.2021			
		30.01.2021 To 5.02.2021			
3	<b>Unit III: Web Techniques and MYSQL</b>  <b>Cookies &amp; Sessions (JavaScript)</b> Anatomy of a cookie, setting a cookie with PHP, deleting a cookie, creating session cookie, starting a session, working with session variables, destroying a session, Encoding and decoding session variables. <b>Introduction to MySQL</b> Introduction to MySql, Benefits of MySql, Basics: reserve words, key words, variables, data types, Types of commands: Data Definition Commands, Data Manipulation Commands, Data Control Commands Clauses: where, order by, group by, having, like, between, Database connectivity <b>PHP framework and Handling email with php</b> Introduction to PHP framework, Features, Applications, one example like Code Igniter Sending email with php, Email id validation and verification	6.02.2021  To 10.02.2021	15	PPT representatio n for array operations	
		11.02.2021 To 17.02.2021			
		18.02.2021 To 23.02.2021			

4	<b>Unit IV: Web Designing Technologies and Ajax</b> Overview of JavaScript, Basic Syntax (JS datatypes, JS variables), Primitives, Operations and Expressions, Screen Output and keyboard input (Verification and Validation), JS Control statements, JS Functions, JS popup boxes (alert, confirm, prompt), Introduction to CSS <b>Introduction to AJAX</b> Introduction of AJAX, Simple AJAX Example, Performing simple AJAX validation	24.02.2021 To 01.03.2021	15	PPT representati on for array operations	
		02.03.2021 To 08.03.2021			
		21.03.2021 To 31.03.2021			



**Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur**

**Teaching Plan (Semester-IV)**

**(January-2021- to March-2021)**

**1. Details of Classes to be taught**

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B. Voc. (CT). S.Y.	A. B. Kumbhar	Computer Technology	U-PBJ-429 PHP, Bootstrap and jQuery	60


Sr. No.	Unit and Chapter to be covered	Date	Expected No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
1	<b>Unit I: PHP</b> Introduction, Syntax, Variables, Print/Echo, Datatypes, Strings, Constants, Operators, If.....Else.... Elseif, Switch, While Loops, For Loops, Function, Arrays, Forms	22.02.2021 To 26.02.2021	05	PPT representation for array operations	
		27.02.2021 To 03.03.2021	04		
		04.03.2021 To 09.03.2021	06		
2	<b>Unit II: Introduction to BootStrap</b> Bootstrap- Get Started, What is Bootstrap? Bootstrap CDN Bootstrap is Mobile-First, Containers, Basic Bootstrap Pages, Bootstrap Grids,	20.01.2021 To 23.01.2021	20	PPT representation for array	



	Bootstrap Grid System, Grid Classes, and Basic Structure of a Bootstrap Grid, Equal Columns, and	25.01.2021 To 29.01.2021		operations	
--	---	--------------------------------	--	------------	--



	Unequal Columns. Typography, Table, Images, Wells, Alerts.	30.01.2021 To 5.02.2021			
3	<b>Unit III: BootStrap UI</b> Button, Button groups, Badges/Labels Progress Bars, Pagination, pager, List groups, Panels, Drop Down, Collapse, Tabs/Pills, Navbars	06.02.2021 To 10.02.2021	10	PPT representation for array operations	
		11.02.2021 To 17.02.2021			
		18.02.2021 To 23.02.2021			
4	<b>Unit IV: JQuery</b> What is jQuery? Downloading and installing jQuery Creating a simple jQuery, enabled page Overview of jQuery's Retrieving Page Content - Using basic jQuery selectors, filters, attribute filters, Child, visibility, and content filters, Form selectors and filters. Traversing documents, Understanding jQuery statement, Binding and unbinding events, Convenient event helper methods, Using the jQuery event object, jQuery Animations and Effects. Using the jQuery UI Plug in Manipulating Page, Working with Events.	24.02.2021 To 01.03.2021	15	PPT representation for array operations	
		02.03.2021 To 08.03.2021			
		21.03.2021 To 31.03.2021			

  
 A. B. Kumbhar  
 Teacher

  
 HoD  
 Dept. of Computer Science  
 Rajarshi Shahu Mahavidyalaya, Latur

  
 Principal  
 PRINCIPAL  
 Rajarshi Shahu Mahavidyalaya, Latur  
 (Autonomous)