## Rajarshi Shahu Mahavidyalaya (Autonomous), Latur

# **Faculty Of InformationTechnology.**

### **Structured Work Plan for Teaching**

**Academic Year (2018-2019)** 

(29-November - 2018 TO 21- March-2019)

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

Sr. No.	Class	Name of Asst. Prof.	Course Title	Course Code	Practical Paper Code	Total Teaching Hours
1	B.C.A. S.Y. [IV- Semester]		Linux O.S.	BCA.S4.402 Total Credit: 02	BCA.402.PR1 Total Credit: 02	TH:71 PR:15
2	B.C.A. T.Y. [VI- Semester]	Mr. Shaikh Riyaj Shaikh Saheb	Digital Image Processing	U-DIP-697 Total Credit: 02	BCA.602.PR2 Total Credit: 02	TH:68 PR:15
3	B.Sc.C.S. T.Y. [VI – Semester]		Web Programming PhP	U-WPU-688	U-LAC-693 Total Credit: 02	TH:77 PR:15

### 2. Summary of Lesson Plan

Name of Teacher: Mr. Shaikh Riyaj Shaikh Saheb Class : B.C.A.. S.Y. [IV - Semester]

Sr.	Course Title/		D	ate	No. of	Academic activities	No. of test/ Assignment with Topic	
No.	Course Code	Unit and Chapter to be covered	From	То	Lectures	to be organized		
1		UNIT I 1. Introduction 1.1. History of Unix 1.2. Directory structure of Linux 1.3. History of Linux 1.4. Comparison of various operating systems 1.5. Advantages of Linux, Flavors of Linux, Installation notes, Linux Loader, Linux kernel, linux filesystem 2. File System and Devices 2.1. File System concept ext3, ext2. 2.2. File systems: - mount, fsconf and other related commands	29-11-18	19-12-18	12	Class Seminars	Case study on Linux	
2		UNIT II 3. Working with permissions 3.1. Assigning file permission 3.2. Directory Permission 3.3. Using text editors 3.4. Working with vi & emacs 3.5. System services and run levels	21-12-18	19-1-19	22	Mini Task	Assignment: study on file permissions	

	Linux O.S. BCA.S4.40 2	3.6. Controlling services at boot with administration tools (chkconfig & using GUI based services) 4. Linux commands 4.1. General Purpose Utilities – - Man, who, login, logout, shutdown, passwd. 4.2. File management commands – cat, cp, rm, mv, wc, 4.3. Filter related commands – grep ,wc, head, tail, sort 4.4. Directory management commands – pwd, cd, mkdir, rmdir, ls 4.5. Checking directories and permissions – pwd, chmod, cd, ls 4.6. Compression commands zip ,unzip, gzip, gunzip, printer related commands lpc ,lpr,lpq.lprm					
3		UNIT III 5. SystemAdministration 5.1. Performing system maintenance 5.2. Communication commands:- write, wall, talk, mesg, motd, 5.3. Pre-login Message 5.4. Managing software with RPM:- Installing, Uninstalling, Upgrading 5.5. Managing users and managing Groups and managing passwords.	29-1-19	20-2-19	14	Seminars	Test

4	UNIT IV 6. Backup strategies 6.1. Choosing Backup Strategies and Operations 6.2. Choosing Backup hardware and media. 6.3. Using backup software and commands 7. Network configuration for Linux 7.1. Network configuration tools 7.2. Dynamic host configuration protocol. 7.3. Network files system. 7.4. Introduction to samba 7.5. Introduction to DNS & Apache web server	29-2-19	21-3-19	23	Mini Task	Assignment on networking and backup related commands
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Name of Teacher: Mr. Shaikh Riyaj Shaikh Saheb Class : B.C.A.. T.Y. [VI - Semester]

	Course Title/	Unit and Chapter to be covered	Date		No. of Lectur	Academic activities	No. of test/ Assignment with	
	Course Code		From	To	es	to be organized	Topic	
1		UNIT- I: Introduction to DIP What is digital image processing? Example fields of digital image processing, Fundamental steps in digital image processing, Components of image processing system. Elements of visual	29-11-18	19-12-18	16	Class Seminars	Assignment on steps in DIP	

		perception, Lights and electromagnetic spectrum, Image sensing and acquisition, Image sampling and quantization, Some basic relationship between pixels. Unit -II Digital Image					
2	Digital Image Processing <b>U-DIP-697</b>	Representation using Matlab Digital Image Representation: Coordinate Conventions, Images as Matrices Reading Images, Displaying Images, Writing Images, Data Classes, Image Types: Intensity Images, Binary Images, Converting between Data Classes and Image Types: Converting between Data Classes, Converting between Image Classes and Types, Array Indexing: Vector Indexing, Matrix Indexing, Selecting Array Dimensions, Some Important Standard Arrays. Introduction to M-Function Programming: M-Files, Operators, Flow Control, Code Optimization, Interactive I/O	21-12-18	19-1-19	18	Mini Task	Assignment on input output statements

3	usi Inte Fui Co Tra Fui Tra His Plo Ima Eq (Sp	nit- III Intensity transformation sing Matlab tensity Transformation Functions: unction imadjust, Logarithmic and ontrast-Stretching ransformations, Some Utility Munctions for Intensity ransformations stogram Processing and Function otting: Generating and Plotting range Histograms, Histogram qualization, Histogram Matching recification) patial Filtering: Linear Spatial litering, Nonlinear Spatial Filtering	29-1-19	20-2-19	16	Mini Task	Assignment on control constructs and Histogram processing functions
4	Pro	nit –IV Frequency Domain rocessing and Histogram rocessing requency Domain Processing: The D Discrete Fourier Transform, computing and Visualizing the 2-D FT in MATLAB, Filtering in the requency Domain: Fundamental concepts, Basic Steps in DFT letering, A Model of the Image regradation/Restoration Process, color Image Representation in ATLAB: RGB Images, Indexed rages IPT Functions for anipulating RGB and Indexed rages.	21-2-19	21-3-19	18	Seminar	Assignments on color image processing

Name of Teacher: Mr. Shaikh Riyaj Shaikh Saheb Class : B.Sc.C.S. T.Y. [VI- Semester]

Sr.	Course Title/	Unit and Chanton to be consued	Da	te	No. of	Academic activities	No. of test/ Assignment
No.	Course Code	Unit and Chapter to be covered	From	То	Lectures	to be organized	with Topic
1		Chapter 1 Introduction to PHP 1.1 PHP Basics 1.2 HTTP Basics 1.3 Defining variable and constant 1.4 Php Data type 1.5 Operator and Expression	29-11-18	9-12-18	10	Class Seminars	Assignment on Creating Simple Form
2		Chapter 2 Handling Html Form with Php 2.1 Capturing Form Data 2.2 Dealing with Multi-value filed 2.3 Generating File uploaded form 2.4 Redirecting a form after submission	10-12-18	19-12-18	7	Mini Task	Assignment on Capturing from data
3	Web	Chapter 3 Function 3.1 What is a function 3.2 Define a function 3.3 Call by value and Call by reference 3.4 Recursive function 3.5 String Related Library function Chapter 4 Array 4.1 Anatomy of an Array 4.2 Creating index based and Associative array 4.3 Accessing array Element 4.4 Looping with Index based array 4.5 Looping with associative array	21-12-18	31-12-18	8	Seminars	Test

	Programming	using each() and foreach()					
	Using PhP U-WPU-688	Unit III Chapter 5 State management 5.1 Using query string(URL					
4	0 W10 000	rewriting) 5.2 Using Hidden field 5.3 Using cookies 5.4 Using session	1-1-19	19-1-19	15	Mini Task	Test
5		Chapter 6 String matching with regular expression 6.1 What is regular expression 6.2 Pattern matching in Php 6.3 Replacing text 6.4 Splitting a string with a Regular Expression	29-1-19	20-2-19	16	Seminar	Assignments on Strings
6		Unit IV Chapter 7 Introduction to OOPS 7.1 Class, Objects, Constructor, Destructor 7.2 Access method and properties using \$this variable 7.3 Public, private, protected properties and methods 7.4 Static properties and method 7.5 Inheritance & code reusability 7.6 Polymorphism 7.7 Parent:: & self:: keyword 7.8 Instanceof operator 7.9 Interface	25-2-19	12-3-19	14	Seminar	Assignment on OOPS
7		Chapter 8 Database Connectivity with MySql 8.1 Introduction to RDBMS 8.2 Connection with MySql	13-3-19	21-3-19	7	Mini Task	Assignment on database creation and connectivity

Database
8.3 Performing basic database
operation(DML) (Insert, Delete,
Update, Select)
8.4 Setting query parameter
8.5 Executing query
8.6 Join
8.7 Web Hosting steps

# Rajarshi Shahu Mahavidyalaya (Autonomous), Latur

## Faculty Of InformationTechnology.

**Academic Year (2018-2019)** 

### **Structured Work Plan for Teaching**

(2-July - 2018 TO 31- December-2018)

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

Sr. No.	Class	Name of Asst. Prof.	Course Title	Course Code	Practical Paper Code	Total Teaching Hours
1	M.Sc.C.S. F. Y. [I- Semester]	Mr. Shaikh Riyaj Shaikh Saheb	OOP using Python	P-OUP-597 Total Credit:04	MSCCS-LAB-2 Total Credit:02	TH: 62 PR: 15
2	M.Sc.C.S. S. Y. [III- Semester]	Mr. Shaikh Riyaj Shaikh Saheb	Software Testing	P-SOT-331 Total Credit:		TH: 53

### 1. Summary of Lesson Plan

Name of Teacher: Mr. Shaikh Riyaj Shaikh Saheb Class: M.Sc.C.S. F. Y. [I- Semester]

Sr. No.	Course Title/ Course Code	Unit and Chapter to be covered	Date	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic
			From	То			
1		Unit I : Beginning python Introduction, history, features, installation, lexical matters.	2-7-18	24-7-18	20	Class Seminar	Installation of python idle
2		Unit II: Getting Started Simple program, identifiers, multiline comments, statements, varibals, strings, decisions, looping, controls, pass statements	25-7-18	6-8-18	12	Task On data classes	Assignment on creating simple program in python
3	OOD using	Unit III: Sequence Strings, lists, tuples, exceptions, detecting and handling exceptions, raising an exception	16-8-18	6-9-18	18	Study of control construct	Assignment on handling exceptions
4	OOP using Python P-OUP-597	Unit IV: Functions, class and oops Functions, calling, passing arguments, recursion, classes, instances, methods, subclassing and derivation inheritance interfaces and objects.	8-9-18	3-10-18	12	Seminar	Assignment on OOP concepts

### 2. Summary of Lesson Plan

Name of Teacher: Mr. Shaikh Riyaj Shaikh Saheb Class: M.Sc.C.S. S. Y. [III- Semester]

Sr. No.	Course Title/ Course Code	Unit and Chapter to be covered	Date	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic
140.	Course coue		From	То	Lectures	to be organized	with topic
1	Software Testing P-SOT-331	Unit I: Software Testing Background and The Software Development Process The Psychology of Testing, Software Testing Principles., Software Testing Background: What Is a Bug?, Terms for Software Failures, Software Bug: A Formal Definition, Why Do Bugs Occur?, What Exactly Does a Software Tester Do?, What Makes a Good Software Tester?, The Software Development Process: Product Components, What Effort Goes Into a Software Product?, Product Components, What Effort Goes Into a Software Product?, What Parts Make Up a Software Product?, Software Development Lifecycle Models: Big-Bang, Code-and-Fix, Waterfall, Spiral.	4-7-18	23-7-18	15	Class Seminar	Assignment on Testing principles
2		Unit II: The Realities of	24-7-18	6-8-18	10	Task	Assignment on study of

	Software Testing and Testing				On data	testing tools
	Fundamentals Introduction, Testing Axioms, Software Testing Terms and Definitions: Precision and Accuracy, Verification and Validation, Quality and Reliability, Testing and Quality Assurance (QA). Testing the Software with Blinders On: Dynamic Black-Box Testing: Testing the Software While Blindfolded, Test-to-Pass and Test-to-Fail, Equivalence Partitioning, Data Testing, Boundary Conditions, Sub- Boundary Conditions, Default, Empty, Blank, Null, Zero, and None, Invalid, Wrong, Incorrect, and Garbage Data, State Testing ,Testing the Software's Logic Flow, Testing States to Fail.				testing	
3	Skills An Overview of Configuration Testing, Compatibility Testing Overview, The overall course of a test: Planning, Execution, Evaluation. Testing Strategies: Explorative Testing, Automated Testing, Testing by document, Smoke Test. Testing Methods: Blackbox, Whitebox, Gray Box.	16-8-18	1-9-18	12	Survey of testing tools open source	Assignment on testing statergires
4	Unit IV: Testing Web Applications: Testing Concepts for WebApps: Dimensions of Quality, Errors within a WebApp Environment, Testing Strategy,	2-9-18	3-10-18	16	Seminar	Assignment on Study of UI testing

Test Planning. The Testing
Process—An Overview.
Content Testing:Content
Testing Objectives, Database
Testing. <b>User Interface</b>
<b>Testing:</b> Interface Testing
Strategy, Testing Interface
Mechanisms, Testing Interface
Semantics Usability Tests,
Compatibility Tests.
Component-Level Testing.
Navigation Testing: Testing
Navigation Syntax, Testing
Navigation Semantics.
Configuration Testing: Server-
Side Issues, Client-Side Issues.
Security Testing. Performance
Testing: Performance Testing
Objectives, Load Testing, Stress
Testing

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## **Faculty Of InformationTechnology.**

#### **Structured Work Plan for Teaching**

**Academic Year (2018 – 2019)** 

(2-July - 2018 TO 31- December-2018)

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

Sr. No.	Class	Class Name of Asst. Prof. Course Title Cour		Course Code	Practical Paper Code	Total Teaching Hours
1	B.C.A. T.Y. [V- Semester]	Mr. Shaikh Riyaj Shaikh Saheb	Cyber Security	BCA 502 Total Credit: 02	BCA.501.PR1 Total Credit: 02	TH: 59 PR: 15

#### 2. Summary of Lesson Plan

Name of Teacher: Mr. Shaikh Riyaj Shaikh Saheb Class: B.C.A. T.Y. [V- Semester]

Sr. No.	Course Title/ Course Code	Unit and Chapter to be covered	Date	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic
			From	То			

1		UNIT – I 1 Object and Scope of the IT Act 1.1 Genesis 1.2 Object 1.3 Scope of the Act 2 Encryption 2.1 Symmetric Cryptography 2.2 Asymmetric Cryptography 2.3 RSA Algorithm 2.4 Public Key Encryption	2-7-18	3-7-18	20	Class Seminar	Assignment on cryptography
2		UNIT – II 3 Digital Signature 3.1 Technology behind Digital Signature 3.2 Creating a Digital Signature 3.3 Verifying a Digital Signature 3.4 Digital Signature and PKI 3.5 Digital Signature and the Law	30-7-18	6-8-18	7	Task On digital signature	Assignment creating digital signature
3	Cyber Security BCA 502	UNIT – III  4 Domain Name Disputes and Trademark Law  4.1 Concept of Domain Names 4.2 New Concepts in Trademark Jurisprudence 4.3 Cyber squatting, Reverse Hijacking, Meta tags, Framing, Spamming, 4.4 Jurisdiction in Trademark Dispute 5 Cyber Regulations Appellate Tribunal 5.1 Establishment & Composition Of Appellate Tribunal 5.2 Powers of Adjudicating officer to Award Compensation 5.3 Powers of Adjudicating officer to Impose Penalty	16-8-18	6-9-18	16	Survey of domain name	Assignment to study powers of AO
4		UNIT – IV 6 The Cyber Crimes 6.1 Tampering with Computer Source Documents 6.2 Hacking with Computer System 6.3 Publishing of Information Which is Obscene in Electronic Form	8-9-18	3-10-18	16	Seminar	Assignment on Study of digital certificate

6.4 Offences: Breach of Confident	iality		
& Privacy			
6.5 Offences : Related to Digital			
Signature Certificate			