Rajarshi Shahu Mahavidyalaya (Autonomous), Latur Department of information Technology Academic Year 2019-2020 Teaching Plan Term-I

Name of Teacher: Jyoti V. Mashalkar Class: B.Sc.C.S. T.Y. Semester: V Course Title: Digital Image Processing

Course Code: U-DIP-602

Unit	Topics to be covered	Date	No. of Lectures
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 perception, Lights and electromagnetic spectrum, Image sensing and acquisition, Image sampling and quantization, Some basic relationship between pixels	24/6/2019 to 20/7/2019	14
Unit - II	Digital image 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	22/7/2019 to 13/8/2019	15
Unit - III	Intensity transformation using Matlab Intensity Transformation Functions: Function imadjust, Logarithmic and Contrast-Stretching Transformations, Some Utility M-Functions for Intensity Transformations , Histogram Processing and Function Plotting: Generating and Plotting Image Histograms, Histogram Equalization, Histogram Matching (Specification), Spatial Filtering: Linear Spatial Filtering, Nonlinear Spatial Filtering	14/8/2019 to 10/9/2019	13
Unit - IV	Frequency Domain Processing and Histogram Processing Frequency Domain Processing: The 2-D Discrete Fourier Transform, Computing and Visualizing the 2-D DFT in MATLAB, Filtering in the Frequency Domain: Fundamental Concepts, Basic Steps in DFT Filtering, A Model of the Image Degradation/Restoration Process, Color Image Representation in MATLAB: RGB Images, Indexed Images, IPT Functions for Manipulating RGB and Indexed Images.	27/9/2019 to 24/10/2019	13

Rajarshi Shahu Mahavidyalaya (Autonomous), Latur Department of information Technology Academic Year 2019-2020 Teaching Plan

Name of Teacher: Jyoti V. Mashalkar Class: B.Sc.C.S. S.Y. Semester: III Course Title: Operating System

Course Code: U-OPS-385

Unit	Topics to be covered	Date	No. of Lectures
	Introduction to Operating System		
	Definition of Operating System, Functions of Operating System, Types of Operating System, Operating System as resource manager, Hierarchical structure of Operating System	24/6/2019	
Unit - I		to	14
		22/7/2019	
	Memory Management	23/7/2019	
Unit - II	Single contiguous allocation, Partitioned allocation, Paged memory management, Introduction to demand paged & segmented memory management	to	15
		14/8/2019	
	Process Management		
	What is process?, Process Control Block, Process states, Job Scheduling & Process Scheduling, Process Synchronization, Race Condition, Introduction to Deadlocks	19/8/2019	
Unit - III		to	13
		12/9/2019	
	Device Management and File Systems		
Unit - IV	Device Management Techniques of Device Management, Dedicated, Shared,	26/9/2019 to	10
	Virtual Devices, Device Characteristics, Channels & Control Units		
		24/10/2019	
	File Systems A Simple file system, General Model of file system, Symbolic file system		

Course Teacher





Teaching Plan Academic Year 2019-2020

Name of Teacher: Jyoti V. Mashalkar Class: B.Sc.C.S. T.Y. Semester:VI Course Title: Principles of Compiler Design

Course Code: U-PCD-702

Unit	Topics To be Covered	Date	No. of Lectures
UNIT – I	Programming Languages and Compilers Introduction to Compilers ,Compilers and translators, the structure of compiler, Compiler writing tools, High level programming languages, Definitions of programming languages, A lexical and syntactic structure of a language Data structures, Operators, Statements	16/12/2019 to 6/1/2020	15
UNIT – II	Lexical Analysis Lexical analysis, 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	7/1/2020 to 30/1/2020	17
UNIT – III	BasicParsingTechniquesandSyntaxDirectedTranslationContext free grammars, Introduction to parsers, Shift reduceparsing, Top-down parsing, OperatorPrecedence parsing,Predictive parsers, Introduction Syntax Directed Translation,Syntax directed Schemes, Implementation of Syntax directedtranslators Intermediate code, Postfix notation and evaluationof postfix expressions, Parse trees and syntax trees	31/1/2020 to 26/2/2020	17
UNIT – IV	Symbol Tables, Errors and Code Optimization The contents of a symbol table, Data structures for a symbol table, Errors: Lexical-phase errors, Syntactic phase errors, Semantic errors, Introduction Code Optimization, Sources of optimization	6/3/2020 to 31/3/2020	16

Course Teacher



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