

	back, Read consistency, Database recovery, Flash back operations 4. RAC Database Overview of Real Application Clusters, RAC database		31.08.2018	PPT Presentation	
3	Unit III 15 hrs 5. Backup and Recovery Logical Backup -data pump export/import process, Physical backup - Offline Online backup, Flash Recovery area 6. Database Tuning Tuning - application design, effective table design, Distribution of CPU requirements, Effective application design, Tuning SQL, Impact of order of load rates, Additional Indexing options, Generating explain plan.	17	01.09.2018 To 12.09.2018	PPT Presentation	--
4	Unit IV 7 Database security & Auditing Non database security, Database authentication methods, Database authentication, DBA authentication, user and privilege management: Creating database users, Identifying system and object privileges, Granting and revoking privileges, Creating and modifying roles, Auditing	06	01.10.2018 To 6.10.2018	--	Unit Test II (MCQ) 07.10.2018 to 22.10.2018

Teacher

Head

Principal

Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur

Teaching Plan (Semester-I)

(2018 -2019)

1. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	M.Sc. CS FY	Mrs. K. M. Pradhan	Computer Science	P-DAA-326 Design Analysis and Algorithm	60

2. Summary of Lesson Plan

3.

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 A simple example of design using insertion sort, pseudo code for insertion sort,time complexity. Performance Analysis – Space complexity and Time complexity (posteriori testing and priory approach), Asymptotic Notations (O , Ω , Θ), Examples on Asymptotic Notations, Polynomial vs. Exponential Algorithms .Average, Best and Worst case complexity.	16	09.07.2018 to 19.07.2018	PPT representation	--
2	UNIT II: Divide and Conquer Algorithms, Greedy Algorithms 15 hrs Introduction to Divide and Conquer Algorithms, Finding the Maximum and Minimum, Quick sort (Derivation of Average case analysis and Worst case analysis), Binary Search (Derivation of	14	20.07.2018 to 23.08.2018		Activity based Unit Test-I 14.09.2018 to 30.09.2018

	average case analysis), and Strassen's Matrix Multiplication. Introduction to Greedy Algorithms – Fractional Knapsack problem, Minimum cost spanning trees, Kruskal's and Prim's Algorithms, Optimal Merge patterns and Single-Source Shortest Paths.			PPT Presentation	
3	<p>UNIT III: Dynamic Programming, Back Tracking and Branch & Bound Algorithms</p> <p>Dynamic Programming Definition - All-pairs shortest paths, Traveling salesman problem and optimal parameterization for product of sequence of matrices.</p> <p>Back tracking and Branch and Bound Algorithms Introduction – Nqueens Problem, Sum of Subsets problem using Back tracking algorithms. Traveling Salesman problem using branch and bound method.</p>	15	24.08.2018 To 10.09.2018	PPT Presentation	--
4	<p>UNIT IV: Graphs and Heaps & Lower bound Theory Graphs and Heaps Definitions – Adjacency Matrix, Adjacency Lists. Breadth First Search and Traversal, Depth First Search and Traversal. Priority Queues using Heap and Design of Heap sort using.</p>	15	11.09.2018 To 5.10.2018	--	<p>Unit Test II (MCQ) 07.10.2018 to 22.10.2018</p>

Teacher

Head

Principal

Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur

Teaching Plan (Semester-II)

(2018 -2019)

4. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	M.Sc. CS FY	Mrs. K. M. Pradhan	Computer Science	P-NUM-126 Numerical Methods	60

5. Summary of Lesson Plan

6.

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 : Computer Arithmetic & Solution of Algebraic equations Computer Arithmetic .Floating Point representation of Numbers, Arithmetic operation with Normalized floating point, Solution of algebraic equations, Bisection method, Method of false position, Newton-Raphson Method	20	29.11.2018 to 24.12.2018	PPT representation	--
2	Unit-II: Interpolation and Numerical Differentiation & Integration Finite differences [forward & backward] Lagrange interpolation , Difference tables Numerical differentiation & numerical integration, Trapezoidal rule, Simpson's 1/3 Rule, Simpson's 3/8 Rule	14	25.12.2018 to 19.01.2019	PPT Presentation	Activity based Unit Test-I 14.09.2018 to 30.09.2018

3	Unit-III: Matrices & Linear system of equations Introduction, Solution of linear system, Matrix inversion method, problems Gaussian elimination method, Modification of gauss method to compute the inverse	15	29.01.2019 To 25.02.2019	PPT Presentation	--
4	Unit-IV: Curve Fitting Least square Curve fitting, Fitting a straight line Problems Non linear curve fitting: problems polynomial of nth degree problems	15	26.02.2019 To 21.03.2019	--	Unit Test II (MCQ) 07.10.2018 to 22.10.2018

Teacher

Head

Principal

Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur

Teaching Plan (Semester-IV)

(2018 -2019)

7. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	M.Sc. CS SY	Mrs. K. M. Pradhan	Computer Science	P-SFC-408 Soft Computing	60

8. Summary of Lesson Plan

9.

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 Fuzzy Logic 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.	20	29.11.2018 to 24.12.2018	PPT representation	--
2	Unit –II: Operations on fuzzy sets & Introduction to Neural Networks Fuzzy complements, Fuzzy Union, Fuzzy Intersections, Crisp & Fuzzy Relation , Binary Fuzzy Relation, Binary Relation on single set, Fuzzy Equivalence Relations, Fuzzy Compatibility Relation. Introduction to Neural Networks and Difference	14	25.12.2018 to 19.01.2019	PPT Presentation	Activity based Unit Test-I 14.09.2018 to 30.09.2018

3	<p>Unit- III: Introduction to Neural Networks, Multilayer Feed forward Network</p> <p>Learning Rules-Supervised Learning-Unsupervised Learning Perceptron Learning-Reinforcement Learning-Delta Learning Rule</p> <p>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 RBF N/W</p>	15	<p>29.01.2019 To 25.02.2019</p>	PPT Presentation	--
4	<p>Unit-IV : Recurrent Network and Unsupervised Learning, Fuzzy System, Neuro Fuzzy System and Applications 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 Recognition, Character, Face, Finger, Palm, Iris Recognitions, Application in Expert System</p>	15	<p>26.02.2019 To 21.03.2019</p>	--	<p>Unit Test II (MCQ) 07.10.2018 to 22.10.2018</p>

Teacher

Head

Principal