SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

RAMAPURAM CAMPUS, CHENNAI-600089

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

LESSON PLAN - LAB

Degree/Branch: B.Tech / CSE

Year/ Sem: II / IV

Sub Code: 18CSC204J **Practical Hours : 30**

Sub Name: DESIGN AND ANALYSIS OF ALGORITHMS **Total Hours : 30**

S.No.	Lecturer Topics	No. of Hours	Learning Resource	Reference Page
1	Simple Algorithm-Insertion sort	2	LR1	65
2	Bubble Sort	2	LR4	68
3	Recurrence Type-Merge sort, Linear search	2	LR4	109
4	Quicksort, Binary search	2	LR4	269,326
5	Strassen Matrix multiplication	2	LR4	284
6	Finding Maximum and Minimum in an array, Convex Hull problem	2	LR4	277
7	Huffman coding, knapsack and using greedy	2	LR4	393
8	Various tree traversals, Krukshall's MST	2	LR4	401
9	Longest common subsequence	2	LR4	825
10	N queen's problem	2	LR4	522
11	Travelling salesman problem	2	LR4	559
12	BFS and DFS implementation with array	2	LR1	594,603
13	Randomized quick sort	2	LR1	179
14	String matching algorithms	2	LR1	990
15	Discussion over analyzing a real time problem	2	LR4	--
	Total Hours	**30**		

Approved by

HOD/CSE 18/1/21.

Prepared by

M.AZHAGIRI

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RAMAPURAM CAMPUS, CHENNAI-600089

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

LIST OF EXPERIMENTS

Degree/Branch: B.Tech / CSE

Year/ Sem: II / IV

Sub Code: 18CSC204J **Practical Hours : 30**

Sub Name: DESIGN AND ANALYSIS OF ALGORITHMS **Total Hours : 30**

S.No.	Name of the experiment	No. of Hours
	PHASE-I Experiments	
1	Simple Algorithm-Insertion sort	2
2	Bubble Sort	2
3	Recurrence Type-Merge sort, Linear search	2
4	Quicksort, Binary search	2
5	Strassen Matrix multiplication	2
6	Finding Maximum and Minimum in an array, Convex Hull problem	2
7	Huffman coding, knapsack and using greedy	2
8	Various tree traversals, Krukshall's MST	2
	PHASE-II Experiments	
9	Longest common subsequence	2
10	N queen's problem	2
11	Travelling salesman problem	2
12	BFS and DFS implementation with array	2
13	Randomized quick sort	2
14	String matching algorithms	2
15	Discussion over analyzing a real time problem	2

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RAMAPURAM CAMPUS, CHENNAI-600089

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

MARK SPLIT UP

Degree/Branch: B.Tech / CSE

Year/ Sem: II / IV

Sub Code: 18CSC204J **Practical Hours : 30**

Sub Name: DESIGN AND ANALYSIS OF ALGORITHMS **Total Hours : 30**

S.NO	CONTENT	MARKS
1	**CONCEPT EXPLANATION AND ALGORITHM** 1.1 Concept explanation-1 Mark 1.2 Algorithm (Logic) - 1 mark 1.3 Presentation-1 Mark	**3 Marks**
2	**CODING** 2.1 Implementing the Concept-2 Marks 2.2 Code Efficiency-1 Mark	**3 Marks**
3	**EXECUTION AND TESTING** 3.1 Various Inputs (Generic)-1 Mark 3.2 Output-1 Mark	**2 Marks**
4	**VIVA** 4.1 Program Logic-1 Mark 4.2 Answers for related questions-1 Mark	**2 Marks**
TOTAL		**10 Marks**

Approved by

HOD/CSE 18/11/21

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