PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY PANIPAT
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
LESSON PLAN

Subject Name: - AA
Branch/Semester: -5th Sem.

Subject Code: - PC-CS-T307A

Sr. No.	Lecture No.	Topics To Be Covered
1	L 1	Algorithms and its complexity (Time and Space),
2	L 2	Algorithm Analysis (Worst, Best & Average case),
3	L 3	Pseudocode Conventions,
4	L 4	Asymptotic Notations,
5	L 5	Binary Search Trees
6	L 6	Recurrence Relation
7	L 7	Methods for solving Recurrence (Substitution)
8	L 8	Recursion Tree
9	L 9	Master Theorem
10	L 10	Dynamic Programming:- Elements,
11	L 11	Matrix-chain multiplication,
12	L 12	Longest common subsequence.
13	L 13	Greedy Algorithms:- Elements,
14	L 14	Activity Selection problem,
15	L 15	Huffman codes, Task scheduling problem, Knapsack Problem,
16	L 16	Probabilistic analysis concepts,
17	L 17	Hiring Problem and its probabilistic analysis.
18	L 18	Review of Graph Algorithms:- Traversal methods(Depth first and Breadth first search),

19	L 19	Topological sort, Strongly connected components,
20	L 20	Minimum Spanning Trees- Kruskal and Prims,
21	L 21	Single Source shortest path,
22	L 22	Relaxation, Dijkstra's Algorithm,.
23	L 23	Bellman-Ford Algorithm,
24	L 24	Single source shortest path for directed acylic graphs,
25	L 25	All pair shortest path- Floyd Warshall Algorithm
26	L 26	The Naïve string-matching algorithm,
27	L 27	Rabin-Karp Algorithm,
28	L 28	String matching with finite automata,
29	L 29	Knuth-Morris-Pratt Algorithm