PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(DEPARTMENT OF CSE (AI-ML)

Subject Name: - AIML Subject Code:-PC-CS-311A 5th Sem

LESSON PLAN

Sr. No.	Lecture No.	Topics To Be Covered	CO Covered	Assignment No	Teaching Methodology
1	L 1	Games, theorem proving	CO1	Assignment No 1	White Board
2	L 2	Natural language processing, vision and speech processing	CO1	Assignment No 1	Smart Board
3	L 3	Robotics, expert systems, AI techniques-search knowledge, abstraction	CO1	Assignment No 1	Smart Board
4	L 4	AI techniques-search knowledge, abstraction.	CO1	Assignment No 1	White Board
5	L 5	State space search; production systems	CO2	Assignment No 1	White Board
6	L 6	Search space control; depth first search, breadth-first search.	CO2	Assignment No 1	White Board
7	L 7	Heuristic Based Search: Heuristic search, Hill climbing	CO2	Assignment No 1	White Board
8	L 8	best-first search,A*Algorithm	CO2	Assignment No 1	White Board
9	L 9	AO* algorithm	CO2	Assignment No 1	White Board
10	L 10	Min-max algorithms,	CO2	Assignment No 1	White Board
11	L 11	, game playing – Alpha beta pruning branch and bound,	CO2	Assignment No 1	White Board
12	L 12	Problem Reduction, Constraint Satisfaction End, Means-End Analysis	CO2	Assignment No 1	White Board
13	L 13	Game Tree, Minimax Algorithm, Alpha Beta Cutoff	CO2	Assignment 2	White Board
14	L 14	Modified Minimax Algorithm, Horizon Effect, Futility Cut-off.	CO2	Assignment 2	White Board

15	L 15	Predicate Logic: Unificatioin, Modus Ponens, Modus Tolens, Resolution in Predicate Logic	CO3	Assignment 2	White Board
16	L 16	Conflict Resolution Forward Chaining, Backward Chaining	CO3	Assignment 2	White Board
17	L 17	Declarative and Procedural Representation, Rule based Systems.	CO3	Assignment 2	White Board
18	L 18	Semantic Nets: Slots, exceptions and default frames, conceptual dependency.	CO3	Assignment 2	White Board
19	L 19	First order logic, Syntax and semantics for first order logic	CO4	Assignment 2	White Board
20	L 20	Inference in First order logic – prepositional versus first order logic	CO4	Assignment 2	White Board
21	L 21	unification and lifting, forward chaining, backward chaining	CO4	Assignment 2	White Board
22	L 22	Knowledge representation	CO5	Assignment 3	Smart Board
23	L 23	**Handling Uncertainty:** Non-Monotonic Reasoning, Probabilistic reasoning,	CO5	Assignment 3	White Board
24	L 24	use of certainty factors, fuzzy logic.	CO5	Assignment 3	White Board
25	L 25	**Natural Language Processing:** Introduction, Syntactic Processing, Semantic Processing, Pragmatic Processing.	CO1	Assignment 3	Smart Board
26	L 26	Introduction to Machine Learning, Different Paradigms of Machine Learning	CO6	Assignment 3	Smart Board

27	L 27	Applications of Machine Learning, An overview of the design cycle and issues in machine learning,	CO6	Assignment 3	Smart Board
28	L 28	well-posed machine learning problems, examples of applications in diverse fields.	CO6	Assignment 3	Smart Board
29	L 29	Unsupervised Learning, K-Means Clustering,	CO6	Assignment 3	White Board
30	L 30	Hierarchical Clustering,Density-Based Clustering	CO6	Assignment 3	White Board