PNS School of Engg. & Tech, Marshaghai, Kendrapara
LESSON PLAN
Session (2024-2025)

Discipline: Computer Science	Semester: 6th	Name of the faculty: Biswaranjan Swain	
Subject: Artificial Intelligence & Machine Learning (Th-4)	**No. of Days/week: 05**	**Start Date:** 04/02/2025 **End Date**: 17/05/2025	

Week	Class Day	Theory Topics	
1st	1st	**Introduction to AI**	
	2nd	Goals and Applications of AI	
	3rd	Intelligent agent	
	4th	Computer vision	
	5th	Natural Language Processing	
2nd	1st	Turing test,	
	2nd	Problem solving in Games	
	3rd	**Introduction to Search Algorithm**	
	4th	Search, Search space	
	5th	Search Tree	
3rd	1st	Categories of Search	
	2nd	Types of Search	
	3rd	Heuristic Algorithm	
	4th	Solution Guaranteed Algorithm	
	5th	Local search and Optimal problem	
4th	1st	Hill climbing, BFS,A*,AO*	
	2nd	Adversarial Search	
	3rd	AI and Game Playing	
	4th	**Knowledge Representation and Reasoning**	
	5th	What to represent, Knowledge	
5th	1st	Properties of Knowledge Representation System,	
	2nd	Approaches	
	3rd	Knowledge Representation	

	4th	Reasoning and
	5th	Types of reasoning
6th	1st	**Machine Learning**
	2nd	Details about Machine Learning
	3rd	Details about Machine Learning
	4th	Statistical or Unsupervised Learning
	5th	Statistical or Unsupervised Learning
7th	1st	ML Properties
	2nd	ML Properties
	3rd	Reinforcement Learning
	4th	Reinforcement Learning Continue
	5th	Decision Tree
8th	1st	Decision Tree
	2nd	**Pattern Recognition**
	3rd	Design Principles of Pattern recognition system
	4th	Design Principles of Pattern recognition system
	5th	Statistical Pattern recognition System
9th	1st	Statistical Pattern recognition System
	2nd	Machine Perception
	3rd	Machine Perception
	4th	Line Finding and Interception
	5th	Line Finding and Interception
10th	1st	Object Identification
	2nd	Object Identification
	3rd	**CLASSIFICATION**
	4th	Classification algorithms
	5th	Classification Problems
11th	1st	Learners in Classification Problems
	2nd	Learners in Classification Problems
	3rd	Use cases of Classification Algorithms
	4th	Use cases of Classification Algorithms
	5th	**Expert System**
12th	1st	Basic Architecture
	2nd	Type of Problem Solved by Expert system
	3rd	Features of an Expert System
	4th	Expert System Architectures

	5th	Expert System Tools
13th	1st	Existing Expert Systems
	2nd	Applications of Expert System Technology

SIGNATURE OF LECTURER   `   **SIGNATURE OF H.O.D**