

**Panipat Institute of Engineering & Technology Department of CSE-AIML  
LESSON PLAN**

**Subject: ACA      Subject code: PER-CS-AIML-415A**

<b>SNo</b>	<b>Topic</b>	<b>CO Covered</b>	<b>Assignment No.</b>	<b>Teaching Methodology</b>
1	Introduction of parallel & serial computer & Evolution of Parallel computer	CO 1	Assignment 1	Smart board
2	Needs & features of parallel computer.	CO 1	Assignment 1	White board
3	Parallelism in uniprocessor	CO 1	Assignment 1	Smart board
4	Architecture of multi-computer & multi-processor	CO 1	Assignment 1	Smart board
5	Classification of multiprocessor UMA & NUMA processor	CO 1	Assignment 1	Smart board
6	COMA & NORMA model	CO 1	Assignment 1	Smart board
7	Multi-vector & SIMD computer	CO 1	Assignment 1	White board
8	Flynn & handler classification.	CO 2	Assignment 1	White board
9	Classification based on coupling b/w processing elements	CO 2	Assignment 1	White board
10	Instruction & thread level parallelism	CO 2	Assignment 2	White board
11	Classification based on grain size & modes of access memory	CO 2	Assignment 2	White board
12	Introduction of n/w properties and program	CO 2	Assignment 2	White board
13	Condition of parallelism and parallelism types	CO 2	Assignment 2	Smart board

14	Types of dependency & programs. partitioning & scheduling program flow mechanisms	CO 2	Assignment 2	White board
15	Control & data flow, reduction computer	CO 2	Assignment 2	White board
16	Introduction of parallel algorithms& programing	CO3	Assignment 2	Smart board
17	Characters tics & techniques of parallel programing	CO3	Assignment 2	Smart board
18	Classification &performance of parallel algorithms	CO3	Assignment 3	Smart board
19	Introduction of vector and array processors	CO3	Assignment 3	Smart board
20	Architecture of vector processor& its classification	CO3	Assignment 3	White board
21	Vector performance modelling & vector instruction types	CO3	Assignment 4	White board
22	Vectorization & design of vectorizing	CO3	Assignment 4	White board
23	Introduction & principle of pipelining	CO4	Assignment 4	White board
24	Implementation of pipelining	CO4	Assignment 4	White board
25	Nonlinear pipeline processor	CO4	Assignment 4	White board
26	Classification of pipeline processor	CO4	Assignment 4	White board
27	General pipeline	CO4	Assignment 4	White board
28	Efficiency, clock period, throughput	CO4	Assignment 4	White board
29	Mechanisms for instruction pipelining	CO4	Assignment 4	White board

30	Linear pipeline processor	CO4	Assignment 4	White board
31	Pipeline Design	CO4	Assignment 4	Smart board
32	Arithmetic pipeline	CO4	Assignment 4	Smart board
33	instruction of pipeline design	CO4	Assignment 4	Smart board
34	Mechanisms for instruction pipelining	CO4	Assignment 4	Smart board
35	Clock period, speed up, efficiency of linear processor	CO4	Assignment 4	White board
36	Throughput of linear and nonlinear processor	CO4	Assignment 4	White board