Lesson Plan

Name of Institute	:	Ambala College of Engineering and Applied Research
Name of the Faculty member	:	Ashok Kumar
Discipline	:	Mechanical Engineering
Semester	:	6th
Subject	:	Computer Aided Design and Manufacturing (ME-308N)
Lesson Plan Duration	:	15 weeks (from January 2020 to April 2020)
Work Load	:	L: 4 T: 0 P: 0

1st	1	Introduction to CAD/CAM
	2	Historical Development
	3	Industrial look at CAD/CAM Application of CA/CAM,
	4	Display devices, Input/ Output Devices, CPU.
2nd	5	Introduction to CIM
	6	Definition, Nature of Elements of CIM,
	7	CIM Wheel
	8	Introduction to computer aided quality control,
3rd	9	Contact and Non Conduct Inspection Method.
	10	Wireframe modeling,
	11	Representation of curves,
	12	**CLASS TEST**
4th	13	, Parametric and non-parametric curves
	14	straight lines, Hermite cubic splines
	15	B splines curves.
	16	Plane surface, ruled surface
5th	17	surface of revolution
	18	bi-cubic surface
	19	Bezier surface
	20	**Sessional Test-1**
6th	21	B spline surface
	22	Solid modeling
	23	boundary representation
	24	sweeping, parametric solid modeling
7th	25	Introduction, Transformation of points & line
	26	2-D translation
	27	rotation, Reflection
	28	**CLASS TEST**
8th	29	Scaling
	30	shearing and combined transformation
	31	, Homogeneous coordinates
	32	Orthographic and perspective Projections.
9th	33	Group technology
	34	Part families,
	35	Part classification
	36	coding

10th	37	Optiz method
	38	product flow analysis
	39	Machine cell Design, Advantages of GT
	40	**Sessional Test-2**
11th	42	Numerical control
	42	Types of NC systems
	43	MCU & other components
	44	Co-ordinate system
12th	45	NC manual part programming
	46	G & M codes
	47	part program for simple parts
	48	Computer assisted part programming.
13th	49	Computer assisted part programming.
	50	Introduction FMS
	51	**CLASS TEST**
	52	FMS component
14th	53	Types of FMS
	54	FMS layout
	55	planning for FMS
	56	advantage and applications
15th	57	Introduction, conventional process planning
	58	Steps in variant process planning
	59	types of CAPP
	60	**Sessional Test-3**

(Signature of the teacher concerned with date)