Lesson Plan

Name of Institute : Ambala College of Engineering and Applied Research

Name of the Faculty member : Er. Ashok Kumar

Discipline : Mechanical Engineering

Semester : 7th

Subject : Computer Aided Design(MEP-401)

Lesson Plan Duration : 15 weeks (from January 2019 to April 2019)

Work Load : L-3 T-0 P-0

Week	Theory	
	Lecture day	Topic (including assignment/ test)
1st	1st	Introduction of cad/cam
	2nd	Traditional product cycle
	3rd	CAD/CAM product cycle
2nd	1st	Rapid prototypic, Design for everthing
	2nd	Computer aided design, computer aided engineering
	3rd	Customer relationship management
		Product lifecycle management
3rd	1st	CAD Hardware introduction
	2nd	Basic structure of computer, input ,storage
	3rd	Processing. Output,control
4th	1st	Microcomputer
	2nd	Minicomputer, mainframes
	3rd	Supercomputer, input out device
5th	1st	LAN,MAN
	2nd	WAN
	3rd	Introduction of CAD Software
6th	1st	Application of software
	2nd	General CAD process
	3rd	Selection of Cad system

7th	1st	Database management system
	2nd	Data structure, database types
	3rd	Function of database
8th	1st	Management system,
	2nd	Advantages of DBMS
	3rd	Database coordinate system
9th	1st	2D Transformation introduction
	2nd	Translation, rotation
	3rd	Scaling, homogeneous coordinate system
10th	1st	Reflection transformation
	2nd	Composite transformation
	3rd	Geometric transformations in engineering design
11th	1st	Need of geometric modeling
	2nd	Requirements of geometric modeling
	3rd	Wire frame modeling, surface modeling
12th	1st	Surface and solid modeling
	2nd	Introduction of solid modeling
	3rd	Boundary representation
13th	1st	Mathematical representation of 2d entity
	2nd	Curves,lines,circle,conic selection,ellipse
	3rd	b-spline curve, non-uniform rational
14th	1st	Mathematicak representation of surface entity
	2nd	Analytic surface ,plane surface, tabulated surface
	3rd	Bazier surface,bilinear surface
15th	1st	Cad/cam data exchange, neutral file formats
	2nd	Data exchange fomat
	3rd	Standared for exchange of product data