## Lesson Plan

Name of Faculty	:	Ms. Prachi, Assistant Professor of CSE
Discipline	:	Computer Science and Engineering
Semester	:	5 <sup>th</sup> (odd)
Subject	:	Computer graphics (PCC-CSE-11-T)
Lesson Dlan Duration		15 weeks (from August to Dec 2024)

Week	Theory		Topic Covered Date and Remarks				
WCCK	Lecture Day	Topic (Including Assignment/Test)	Date	HOD	Director-Principal		
	1.	What is Computer Graphics					
1 <sup>st</sup>	2.	Computer Graphics Applications					
	3.	Computer Graphics Hardware and software					
2 <sup>nd</sup>	4	Points and Lines					
	5	Line drawing algorithms: DDA					
	6	Bresenham"s; Circle drawing algorithms					
	7	Bresenham"s circle drawing					
3 <sup>rd</sup>	8	mid point circle drawing algorithm					
	9	Filled area algorithms					
4 <sup>th</sup>	10	boundary filled algorithm					
	11	Two/Three Dimensional Viewing					
	12	The 2-D viewing pipeline					
5 <sup>th</sup>	13	window to view port mapping					
	14	Clipping: point, clipping line (algorithms):- 4 bit code algorithm					
	15	Sutherlandcohen algorithm					
6 <sup>th</sup>	16	Polygon clipping algorithm					
	17	Sutherland-Hodgeman					
	18	Two dimensional transformations					
7 <sup>th</sup>		1 <sup>st</sup> Minor Test					
	19	Three dimensional transformations: Three dimensional					
8 <sup>th</sup>		graphics concept					
	20	Matrix representation of 3-D Transformations					
	21	Viewing in 3D					
	22	the mathematics of planner geometric projections					
9 <sup>th</sup>	23	Hidden surface removal					
	24	Introduction to hidden surface removal					
	25	scanline algorithm					
10 <sup>th</sup>	26	Representing Curves and Surfaces					
	27	Parametric representation of curves					
11 <sup>th</sup>	28	Bezier curves					
	29	BSpline curves					
	30	Parametric representation of surfaces;					
12 <sup>th</sup>	31	Illumination, shading, image manipulation					
	32	Illumination models					
	33	shading models for polygons					
13 <sup>th</sup>	34	What is an image					
	35	Filtering					
	36	image processing					
14 <sup>th</sup>	27	2 <sup>nd</sup> Minor Test					
15 <sup>th</sup>	37						
	38	coordinate systems			-		
	39	composite transformation					