LESSON PLAN FOR WINTER SEMESTER(2020-21)

Discipline : 1ST Semester(common)
Name of the Faculty: PADMINI PANIGRAHI (Lect. in Mathematics)

Subject: Engg. Mathematics-I	5 therory & 1 tutorial classes per week	From: 25.01.2021 To: 13.03.2021	
Week	**Class Day**	**Theory**	**Range**
1st	1st	**Matrix and Determinant** a) Introduction and Tyoes of Matrix	25.01.2021 to 31.01.2021
	2nd	Algebra of matrix	
	3rd	Determinant	
	4th	Properties of determinant	
	5th	Inverse of a matrix (second and third order)	
	6th	*Tuitorial class*	
2nd	1st	Inverse of a matrix (second and third order)	01.02.2021 to 07.02.2021
	2nd	Cramer's Rule	
	3rd	Solution of simultaneous equations by matrix inverse method	
	4th	**TRIGONOMETRY** Trignometrical Ratios	
	5th	Trignometrical Ratios	
	6th	*Tuitorial class*	
3rd	1st	Compound angles, multiple and sub-multiple angles	08.02.2021 to 14.02.2021
	2nd	Compound angles, multiple and sub-multiple angles	
	3rd	Define inverse circular functions and its properties	
	4th	Define inverse circular functions and its properties	
	5th	**CO-ORDINATE GEOMETRY IN TWO DIMENSIONS** Introduction of geometry in two dimension Distance formulae, division formulae, area of a triangle	
	6th	*Tuitorial class*	
4th	1st	Define slope of a line, angle between two lines	15.02.2021 to 21.02.2021
	2nd	condition of perpendicularity and parallelism.	
	3rd	Different forms of straight lines (only formulae) i) One point form (ii) two point form (iii) slope form (iv) intercept form (v) Perpendicular form	
	4th	Equation of a line passing through a point and (i) parallel to a line	
	5th	Equation of a line passing through a point (ii)perpendicular to a line	
	6th	*Tuitorial class*	

5th	1st	Equation of a line passing through the intersection of	22.02.202 to 28.02.2021
	2nd	Distance of a point from a line	
	3rd	**CIRCLE** Equation of a circle center radius form	
	4th	general equation of a circle	
	5th	Equation of a circle end point of diameter form	
	6th	*Tuitorial class*	
6th	1st	**CO-ORDINATE GEOMETRY IN THREE DIMENSIONS** INTRUDUCTION section formulae	01.03.2021 to 07.03.2021
	2nd	direction ratio, direction cosine angle between two lines condition of parallelism and perpendicular	
	3rd	Equation of a plane i) General form	
	4th	angle between two planes	
	5th	perpendicular distance of a point from a plane	
	6th	*Tuitorial class*	
7th	1st	equation of a plane passing through a point and i) parallel to a plane	08.03.2021 to 13.03.2021
	2nd	equation of a plane passing through a point and ii) perpendicular to a plane	
	3rd	SPHERE Equation of a sphere in centre radius form form	
	4th	Equation of a sphere in General form	
	5th	Equation of a sphere in two end points of a diameter form	
	6th	*Tuitorial class*	