

LESSON PLAN FOR WINTER SEMESTER(2020-21)

Discipline : 1ST Semester(common)

Name of the Faculty: SAMIRA KUMAR PATHI (Lect. in Mathematics)

Subject: Engg. Mathematics-I	5 theory & 1 tutorial classes per week	From: 09/11/2020 of Weeks: 12	To: 31/01/2021 Total no. periods : 60 Theory + 12 Tutorial	No.
Week	Class Day	Theory		Range
1st	1st	Matrix and Determinant a) Introduction and Types of Matrix		09.11.2020 to 15.11.2020
	2nd	Types of Matrix		
	3rd	Algebra of matrix		
	4th	Determinant		
	5th	Properties of determinant		
	6th	<i>Tutorial class</i>		
2nd	1st	Properties of determinant		16.11.2020 to 22.11.2020
	2nd	Inverse of a matrix (second and third order)		
	3rd	Inverse of a matrix (second and third order)		
	4th	Cramer's Rule (Question should be on two variables)		
	5th	Cramer's Rule (Question should be on two variables)		
	6th	<i>Tutorial class</i>		
3rd	1st	Solution of simultaneous equations by matrix inverse method		23.11.2020 to 29.11.2020
	2nd	Solution of simultaneous equations by matrix inverse method		
	3rd	TRIGONOMETRY Trigonometrical Ratios		
	4th	Trigonometrical Ratios		
	5th	Trigonometrical Ratios		
	6th	<i>Tutorial class</i>		
4th	1st	Trigonometrical Ratios		30.11.2020 to 06.12.2020
	2nd	Compound angles, multiple and sub-multiple angles		
	3rd	Compound angles, multiple and sub-multiple angles		
	4th	Compound angles, multiple and sub-multiple angles		
	5th	Compound angles, multiple and sub-multiple angles		
	6th	<i>Tutorial class</i>		
5th	1st	Define inverse circular functions and its properties		07.12.2020 to 13.12.2020
	2nd	Define inverse circular functions and its properties		
	3rd	Define inverse circular functions and its properties		
	4th	Define inverse circular functions and its properties		
	5th	Define inverse circular functions and its properties		
	6th	<i>Tutorial class</i>		

6th	1st	CO-ORDINATE GEOMETRY IN TWO DIMENSIONS Introduction of geometry in two dimension	14.12.2020 to 20.12.2020
	2nd	Distance formulae, division formulae, area of a triangle	
	3rd	Define slope of a line, angle between two lines	
	4th	condition of perpendicularity and parallelism.	
	5th	Different forms of straight lines (only formulae) i) One point form (ii) two point form (iii) slope form	
	6th	<i>Tutorial class</i>	
7th	1st	Different forms of straight lines (only formulae) (iv) intercept form (v) Perpendicular form	21.12.2020 to 27.12.2020
	2nd	Equation of a line passing through a point and (i) parallel to a line	
	3rd	Equation of a line passing through a point (ii)	
	4th	Equation of a line passing through the intersection of two lines	
	5th	Equation of a line passing through the intersection of two lines	
	6th	<i>Tutorial class</i>	
8th	1st	Distance of a point from a line	28.12.2020 to 03.01.2021
	2nd	CIRCLE Equation of a circle center radius form	
	3rd	Equation of a circle center radius form	
	4th	general equation of a circle	
	5th	general equation of a circle	
	6th	<i>Tutorial class</i>	
9th	1st	general equation of a circle	04.01.2021 to 10.01.2021
	2nd	Equation of a circle end point of diameter form	
	3rd	Equation of a circle end point of diameter form	
	4th	CO-ORDINATE GEOMETRY IN THREE DIMENSIONS INTRUCTION	
	5th	Distance formulae	
	6th	<i>Tutorial class</i>	
10th	1st	section formulae	11.01.2021 to 17.01.2021
	2nd	direction ratio, direction cosine	
	3rd	angle between two lines	
	4th	condition of parallelism and perpendicularity	
	5th	Equation of a plane i) General form	
	6th	<i>Tutorial class</i>	
11th	1st	angle between two planes	18.01.2021 to 24.01.2021
	2nd	angle between two planes	
	3rd	perpendicular distance of a point from a plane	
	4th	perpendicular distance of a point from a plane	
	5th	equation of a plane passing through a point and i) parallel to a plane	
	6th	<i>Tutorial class</i>	

12th	1st	equation of a plane passing through a point and ii) perpendicular to a plane	25.01.2021 to 31.01.2021
	2nd	SPHERE Equation of a sphere i) center radius form	
	3rd	Equation of a sphere in General form	
	4th	Equation of a sphere in General form	
	5th	Equation of a sphere in two end points of a diameter form	
	6th	<i>Tutorial class</i>	