

LESSON PLAN FOR WINTER SEMESTER(2022-23)

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: 25.10.2022 of Weeks: 13	To: 31.01.2023 Total no. periods : 65 Theory + 13 Tutorial	No.
Week	Class Day	Theory		Range
1st	1st	Matrix and Determinant a) Introduction and Types of Matrix		25.10.2022 to 30.10.2022
	2nd	Types of Matrix		
	3rd	Algebra of matrix		
	4th	Algebra of matrix		
	5th	Determinant		
	6th	<i>Tutorial class</i>		
2nd	1st	Determinant		31.10.2022 to 06.11.2022
	2nd	Properties of determinant		
	3rd	Properties of determinant		
	4th	Properties of determinant		
	5th	Inverse of a matrix (second and third order)		
	6th	<i>Tutorial class</i>		
3rd	1st	Inverse of a matrix (second and third order)		07.11.2022 to 13.11.2022
	2nd	Inverse of a matrix (second and third order)		
	3rd	Cramer's Rule (Question should be on two variables)		
	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>		
4th	1st	Solution of simultaneous equations by matrix inverse method		14.11.2022 to 20.11.2022
	2nd	Solution of simultaneous equations by matrix inverse method		
	3rd	Solution of simultaneous equations by matrix inverse method		
	4th	TRIGONOMETRY Trigonometrical Ratios		
	5th	Trigonometrical Ratios		
	6th	<i>Tutorial class</i>		
5th	1st	Trigonometrical Ratios		21.11.2022 to 27.11.2022
	2nd	Trigonometrical Ratios		
	3rd	Trigonometrical Ratios		
	4th	Compound angles, multiple and sub-multiple angles		
	5th	Compound angles, multiple and sub-multiple angles		
	6th	<i>Tutorial class</i>		

6th	1st	Compound angles, multiple and sub-multiple angles	28.11.2022 to 04.12.2022
	2nd	Compound angles, multiple and sub-multiple angles	
	3rd	Compound angles, multiple and sub-multiple angles	
	4th	Define inverse circular functions and its properties	
	5th	Define inverse circular functions and its properties	
	6th	<i>Tutorial class</i>	
7th	1st	Define inverse circular functions and its properties	05.12.2022 to 11.12.2022
	2nd	Define inverse circular functions and its properties	
	3rd	Define inverse circular functions and its properties	
	4th	CO-ORDINATE GEOMETRY IN TWO DIMENSIONS Introduction of geometry in two dimension	
	5th	Distance formulae, division formulae, area of a triangle	
	6th	<i>Tutorial class</i>	
8th	1st	Distance formulae, division formulae, area of a triangle	12.12.2022 to 18.12.2022
	2nd	Define slope of a line, angle between two lines	
	3rd	condition of perpendicularity and parallelism.	
	4th	Different forms of straight lines (only formulae) i) One point form (ii) two point form (iii) slope form	
	5th	Different forms of straight lines (only formulae) (iv) intercept form (v) Perpendicular form	
	6th	<i>Tutorial class</i>	
9th	1st	Equation of a line passing through a point and (i) parallel to a line	19.12.2022 to 25.12.2022
	2nd	Equation of a line passing through a point (ii) Perpendicular to a line	
	3rd	Equation of a line passing through the intersection of two lines	
	4th	Equation of a line passing through the intersection of two lines	
	5th	Distance of a point from a line	
	6th	<i>Tutorial class</i>	
10th	1st	Distance of a point from a line	02.01.2023 to 08.01.2023
	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>	
11th	1st	Equation of a circle end point of diameter form	09.01.2023 to 15.01.2023
	2nd	CO-ORDINATE GEOMETRY IN THREE DIMENSIONS INTRUDUCTION	
	3rd	Distance formulae	
	4th	section formulae	
	5th	direction ratio, direction cosine	
	6th	<i>Tutorial class</i>	

12th	1st	angle between two lines	16.01.2023 to 22.01.2023
	2nd	condition of parallelism and perpendicularity	
	3rd	Equation of a plane i) General form	
	4th	angle between two planes	
	5th	perpendicular distance of a point from a plane	
	6th	<i>Tutorial class</i>	
13th	1st	equation of a plane passing through a point and i) parallel to a plane	23.01.2023 to 29.01.2023
	2nd	equation of a plane passing through a point and ii) perpendicular to a plane	
	3rd	SPHERE Equation of a sphere i) center radius 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>	