LESSON PLAN

DEPARTMENT OF MATH & SCIENCE, ITT, CHOUDWAR

SUBJECT: ENGG. MATH 1 Periods: 6 per week SEMESTER: 1st

NAME OF FACULTY: Sk. S. Ali ACADEMIC YEAR.2022-2023

Semester From date: 25/10/2022 To Date: 31/01/2023 No. of weeks: 15

Week	Class Day	Theory / Practical Topics
1st	1st	**INTRODUCTION CLASS**
	2nd	**1) MATRICES AND DETERMINANTS** 2) Types of matrices
	3rd	a)Types of matrices
2nd	1st	b)Algebra of matrices
	2nd	3) Algebra of matrices
	3rd	4) Determinant
3rd	1st	c)Determinant
	2nd	d) Properties of determinant
	3rd	5) Properties of determinant
4th	1st	6) Inverse of a matrix (second and third order) (Question should be on second order matrix)
	2nd	e) Inverse of a matrix (second and third order) (Question should be on second order matrix)
	3rd	f) Cramer's Rule (Question should be on two variables)
5th	1st	7) Cramer's Rule (Question should be on two variables)
	2nd	g) Cramer's Rule (Question should be on two variables)

	3rd	h) Solution of simultaneous equations by matrix inverse method (Question should be on two variables)
6th	1st	i) Solution of simultaneous equations by matrix inverse method (Question should be on two variables)
	2nd	**2) TRIGONOMETRY** a) Trigonometrically ratios
	3rd	b) Compound angles, multiple and sub-multiple angles (only formulae)
7th	1st	c) Define inverse circular functions and its properties (no derivation)
	2nd	**3) CO-ORDINATE GEOMETRY IN TWO DIMENSIONS (Straight line)** a) Introduction of geometry in two dimension
	3rd	b) Distance formulae, division formulae, area of a triangle (only formulae no derivation)
8th	1st	c) Define slope of a line, angle between two lines (only F), condition of perpendicularity and parallelism.
	2nd	d) Different forms of straight lines (only formulae)
	3rd	i) One point form
9th	1st	ii) two point form
	2nd	iii) slope form
	3rd	iv) intercept form
10th	1st	v) Perpendicular form
	2nd	e) Equation of a line passing through a point and

	3rd	i) parallel to a line
11th	1st	ii) Perpendicular to a line
	2nd	f) Equation of a line passing through the intersection of two lines
	3rd	g) Distance of a point from a line
12th	1st	**4) CIRCLE** a) Equation of a circle i) center radius form
	2nd	ii) general equation of a circle
	3rd	iii) end point of diameter form
13th	1st	**5) CO-ORDINATE GEOMETRY IN THREE DIMENSIONS** a) Distance formulae, section formulae, direction ratio
	2nd	b) direction cosine,angle between two lines
		c) (condition of parallelism and perpendicularity)
14th	1st	d) Equation of a plane General form, angle between two planes, perpendicular distance of a point from a plane, equation of a plane passing through a point and
	2nd	e) parallel to a plane
	3rd	f) perpendicular to a plane
15th	1st	**6) SPHERE** a) Equation of a sphere i) center radius form
	2nd	ii) general form
	3rd	iii) two end points of a diameter form (only formulae and problems)