Lesson Plan

Name of Faculty: Ramesh Kumar
Discipline :   Applied Science
Semester :   1st
Subject :   Applied Math-I
Lesson Plan Duration: 16 weeks
Work load: 4 hours/week

Week	Lect Day	Theory
1st	1	Complex Number : definition of complex number, real and imaginary parts of a complex number
	2	Polar and Cartesian form
	3	Conversion of polar and Cartesian form
	4	Conjugate of a complex number, Modulus of complex number
2nd	5	Addition of complex number, Subtraction of complex number
	6	Multiplication of complex number, Division of complex number.
	7	Logarithms and its basic properties.
	8	Logarithms and its basic properties
3rd	9	Meaning of ^nP_r & ^nC_r
	10	Value of ^nP_r & ^nC_r and simple problems
	11	Binomial theorem (without proof) for positive integral index
	12	Binomial theorem for any index
4th	13	Binomial theorem for any index
	14	Binomial Approximation
	15	Class test
	16	Assignment
5th	17	Discussion about assignment
	18	Solution of problems.
	19	Sessional test
	20	Analysis of sessional test
6th	21	PTM
	22	Determinants and Matrices Evaluation of determinants (upto 2nd order)
	23	Solution of equations (upto 2 unknowns) by Crammer's rule
	24	Definition of matrices and its types
7th	25	Addition of matrix
	26	Subtraction of matrices
	27	Multiplication of matrices
	28	Trigonometry : concept of angle, measurement of angle in degrees, grades, radians and their conversions
8th	29	T- Ratios of Allied angles (without proof)
	30	Concept of sum and difference formulae
	31	Problems based on sum and difference formulae

	32	Product formulae (Transformation of product to sum, difference and vice versa)
9th	33	Problems based on Product formulae
	34	Applications of Trigonometric terms in engineering problems such as to Find an angle of elevation, height, distance etc.
	35	Class test
	36	Assignment
10th	37	Discussion about assignment
	38	Solution of problems.
	39	Sessional test
	40	Analysis of sessional test
11th	41	PTM
	42	Cartesian and Polar co-ordinates ,Distance between two points.
	43	Midpoint Formaule
	44	Centroid of a triangle.
12th	45	Straight line : Slope of a line
	46	Equation of straight line in various standards forms : Slope intercept form and intercept form
	47	One-point form, two point form, Symmetric form, normal form and general form
	48	Intersection of two straight lines and concurrency of lines, angle between Straight lines.
13th	49	Parallel and perpendicular lines, perpendicular distance formula.
	50	Conversion of general from of equation to the various forms.
	51	General equation of a circle and its characteristics
	52	To find the equation of a circle, Given- Centre and radius
14th	53	To find the equation of a circle, Given- three points lying on it, Coordinates of end points of a diameter
	54	MATLAB or SciLab software – Theoretical Introduction
	55	MATLAB or Scilab a Simple Calculator (Addition and subtraction of values – Trigonometric and Inverse Trigonometric functions)
	56	General Practice
15th	57	Class test
	58	Assignment
	59	Discussion about assignment
	60	Solution of problems.
16th	61	Sessional test
	62	Analysis of sessional test
	63	PTM
	64	Practice of sample papers.