Lesson Plan

Mathematics-I

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Week	Lecture Day	Topic Including(assignment/Test)
Ist	1	Introduction to syllabus and evaluation scheme
	2	**Unit1 :-AlgebraComplex Numbers** Definition of Complex Number,Real and Imaginary Parts of Complex Numbers
	3	Polar and Cartesian form and their interconversion
	4	Conjugate of Complex Number,Modulus and Amplitude
IInd	1	Addition Subtraction of Complex Numbers
	2	Multiplication and Division
	3	Revision of Complex Numbers
	4	**Logarithm**Logrithm and their basic property
IIIrd	1	Logrithm and their basic property
	2	Revision of Logarithm
	3	**Unit2:-Binomial Theorem Permutation and Combination** Meaning of $^{n}P_{r}$ and $^{n}C_{r}$
	4	Examples basis on $^{n}P_{r}$ and $^{n}C_{r}$
IVth	1	**Binomial Theorem** Binomial theorem for positive integral index without proof
	2	Expansion and General form of Binomial Theorem
	3	Binomial theorem for any index without proof expansion upto three terms
	4	Binomial theorem for any index without proof expansion upto three terms
Vth	1	First Binomial Approximation with application engineering problem
	2	Revision of Binomial Theorem
	3	**Determinant and Matrices** Evaluation of Determinants (upto second order)
	4	Solution of Equation upto 2 unknown by Cramer's rule
VIth	1	First Sessional Test(Tentative)
	2	First Sessional Test(Tentative)
	3	First Sessional Test(Tentative)
	4	Definition of Matrices and its types
VIIth	1	Addition and Subtraction of Matrices (upto second order)
	2	Multiplication of Matrices (upto second order)
	3	Revision of Determinants and Matrices
	4	**Unit3:- Trignometry**Concept of angle ,Measurement of angle in degree , grades, radians
VIIIth	1	Interconversion of Degree ,grade ,and Radian
	2	T-ratios of Allied Angles(without proof)
	3	Sum,Difference formulae and their applications(without proof)
	4	Product Formulae(Transformation of Product to Sum,Difference and vice versa)
IXth	1	Revision of Trignometrysums
	2	Application of Trignometric terms in Engineering problem such as to find an angle of elevation,Height ,Distance etc.,
	3	Application of Trignometric terms in Engineering problem such as to find an angle of elevation,Height ,Distance etc.,

	4	Revision of Heights and Distance Sums
Xth	1	**Unit4:- Co ordinate Geometry** Distance between two points
	2	Mid Point Formulae ,Centroid of vertices of a triangle
	3	Slope of line
	4	Equation of straight line in various standard forms(without proof)
XIth	1	Second Sessional Test(Tentative)
	2	Second Sessional Test(Tentative)
	3	Second Sessional Test(Tentative)
	4	Slope intercept form , intercept form , one point form
XIIth	1	Two point form ,Symmetric form ,Normal form and General form of a straight line
	2	Intersection of two straight lines
	3	Concurrency of lines, Angle between two straight lines
	4	Parallel and Perpendicular lines, Perpendicular distance formula
XIIIth	1	Conversion of general form of equation to various forms
	2	Revision of Straight lines
	3	**Unit5:- Geometry of Circles and softwares** Introduction to circles :-General equation of circle and its characteristics
	4	To find equation of circle given centre and radius
XIVth	1	To find equation of circle given three points lying on it.
	2	To find equation of circle given coordinates of end points of a diameter.
	3	**MAT Lab or SciLab software** Theoretical introduction of MAT LAB or SciLab
	4	Simple calculator(Addition and subtraction of value – Trignometry and inverse Trignometry function)/General Practice
XVth	1	Simple calculator(Addition and subtraction of value – Trignometry and inverse Trignometry function)/General Practice
	2	Third Sessional Test(Tentative)
	3	Third Sessional Test(Tentative)
	4	Third Sessional Test(Tentative)
XVIth	1	Revision of Syllabus
	2	Revision of Syllabus
	3	Discussion of Assignments
	4	Discussion of Previous Papers