

LoGMIEER, Nashik

LECTURE PLAN (Theory)

CLASS: FE				SUBJECT: Engg. Mathematics I					
UNIT(X)	L.NO.(Y)	T.NO.(Z)	TOPICS TO BE COVERED	Wtge	UNIT(X)	L.NO.(Y)	T.NO.(Z)	TOPICS TO BE COVERED	Wtge
1	1	1	1 Rank by Echelon Form	4			3	31 De morgans test	4
1	2	1	2 Normal form	4			4	32 Cauchys integral test	4
		2	3 PAQ form	4	3	23	1	33 Absolute and Conditional Con.,Range of Conv.	4
1	3	1	4 System of linear Equations	4	3	24	1	34 Successive Differentiation-type I	4
1	4	1	5 System of linear Equations	4			2	35 Successive Differentiation-type II	4
1	5	1	6 Linear Dependence and Ind.	4	3	25	1	36 Successive Differentiation-type II	4
1	6	1	7 Linear and Orthogonal Trans.	4			2	37 Successive Differentiation-type IV	4
1	7	1	8 Eigen values and Eigen Vectors	4	3	26	1	38 Leibnitz Theorem-type I	4
1	8	1	9 Eigen values and Eigen Vectors	4	3	27	1	39 Leibnitz Theorem-type II	4
1	9	1	10 Cayley – Hamilton Theorem	4	4	28	1	40 Maclaurin's Series	4
2	10	1	11 Basic Concepts of Complex no.	2	4	29	1	41 Expansions of functions using standard functions	4
		2	12 Modulus and amplitude	2	4	30	1	42 Use of differentiation and integration	4
2	11	1	13 Argand diagram	4	4	31	1	43 Use of substitutions	4
2	12	1	14 DeMoivre's theorem	4	4	32	1	44 Use of complex numbers	4
2	13	1	15 De'Moivre's theorem application	4			2	45 Use of Leibnitz's theorem	4
2	14	1	16 Hyperbolic Functions	4	4	33	1	46 Taylors theorem	4
2	15	1	17 Inverse Hyperbolic Functions	4	4	34	1	47 Indeterminate form-type I	4
2	16	1	18 Logarithm of Complex Numbers	4			2	48 Indeterminate form-type II	4
2	17	1	19 Separation into Real and Imaginary parts	4	4	35	1	49 Indeterminate form-type III	4
2	18	1	20 Separation into Real and Ima.parts	4			2	50 Indeterminate form-type IV	4
3	19	1	21 Infinite Seq.,Infinite & Alternating series	4	4	36	1	51 Indeterminate form-type V	4
3	20	1	22 Cauchys nth root test	4			2	52 Indeterminate form-type VI	4
		2	23 Geometric series	4			3	53 Indeterminate form-type VII	4
		3	24 comparison test	4	5	37	1	54 Partial differentiation type I	6
3	21	1	25 D Alemberts ratio test	4			2	55 Partial differentiation type II	6
		2	26 Raabes test	4	5	38	1	56 Partial differentiation type III	6
		3	27 Cauchys condensation test	4			2	57 Partial differentiation type IV	6
		4	28 auxiliary series	4			3	58 Partial differentiation type V	6
3	22	1	29 Gauss's test	4	5	39	1	59 Homogeneous functions	7
		2	30 Logarithmic test	4			2	60 Eulers theorem	7
<p>Instruction - The syllabus is divided into six units. Fix the number of lectures required to cover a particular units, which may be 8/12. Then fix the topics to be covered into a particular lecture, which may be min 1 to max 4 depending upon content and importance of topic from view point of exam.....</p>									

LoGMIEER, Nashik

LECTURE PLAN (Theory)

CLASS: FE(A) (2016-2017)

SUBJECT: Engg. Mathematics I

UNIT(X)	L.NO.(Y)	T.NO.(Z)	TOPICS TO BE COVERED	Wtge	UNIT(X)	L.NO.(Y)	T.NO.(Z)	TOPICS TO BE COVERED	Wtge
5	40	1	61 Composite function	6				91	
5	41	1	62 Total derivative	6				92	
5	42	1	63 Implicit functions-type I	6				93	
5	43	1	64 Implicit functions-type II	6				94	
5	44	1	65 Implicit functions-type III	6				95	
5	45	1	66 Eulers theorem for 3 variables	7				96	
6	46	1	67 Jacobians	4				97	
		2	68 Chain rule of Jacobians	4				98	
6	47	1	69 Jacobians of implicit functions	4				99	
6	48	1	70 Partial derivatives of implicit functions	4				100	
		2	71 Functional dependence	4				101	
6	49	1	72 Errors and Approximation	4				102	
6	50	1	73 Errors and Approximation	4				103	
6	51	1	74 Maxima and Minima of function of two variables	5				104	
6	52	1	75 Maxima and Minima of function of two variables	5				105	
6	53	1	76 Lagranges method of undetermined multipliers	4				106	
6	54	1	77 Lagranges method of undetermined multipliers	4				107	
			78					108	
			79					109	
			80					110	
			81					111	
			82					112	
			83					113	
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			88					118	
			89					119	
			90					120	

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