

Bhoj Reddy Engineering College for Women, Hyderabad.
Lesson Plan of faculty for the Academic year 2015-16, I Sem.

Name of Faculty: G Sangeetha
Subject: M-III
No. of Lectures per Week: 4

Department: Basic Sciences
Branch: ECE-A

S.NO	DATE	TOPIC TO BE COVERED
		UNIT-1: Linear ODE with Variable Coefficients& Series Solution
1	1/7/15	Introduction to Equations reducible to constant coefficients
2	3/7/15	Cauchy's Differential Equation
3	4/7/15	Legendre's Differential Equation
4	1/7/15,3/7/15,	Tutorial(G3,G2,G1): Cauchy&Legendre
5	7/7/15	Motivation for Series Solution
6	8/7/15	Ordinary Point and Regular Singular point of D.E
7	10/7/15	Transformation of non zero Singular point to zero
8	11/7/15	Series Solution to D.E around zero ,Method of Frobenious
9	7/7/15,8/7/15, 10/7/15	Tutorial(G3,G2,G1):Problems on Method of Frobenious
10	14/7/15	Method of Frobenious
11	15/7/15	Method of Frobenious about zero
12	17/7/15	Method of Frobenious about zero
13	14/7/15,15/7/15,1 7/7/15	Tutorial(G3,G2,G1):Ordinary pt,singular pt
		UNIT-II:Special Functions
14	21/7/15	Legendre Differential Equation
15	22/7/15	General Solution of Legendre Equation
16	24/7/15	Legendre Polynomials
17	25/7/15	Properties
18	21/7/15,22/7/15, 24/7/15	Tutorial(G3,G2,G1):Legendre DE
19	28/7/15	Rodrigues Formula
20	29/7/15	Recurrence Relations
21	31/7/15	Generating Function of Legendre Polynomials
22	1/8/15	Orthogonality
23	28/7/15,29/7/15, 31/7/15	Tutorial(G3,G2,G1):Recurrence Relations
24	4/8/15	Bessels Differential Equation
25	5/8/15	Bessel Functions properties
26	7/8/15	Recurrence Relations

27	8/8/15	Orthogonality
28	4/8/15, 5/8/15, 7/8/15	Tutorial(G3,G2,G1):Bessels DE
29	11/8/15	Generating function
30	12/8/15	Trigonometric Expansions involving Bessel Functions
31	14/8/15	Revision
32	11/8/15, 12/8/15, 14/8/15	Tutorial(G3,G2,G1):Generating Function
		UNIT-III: Complex Functions
33	18/8/15	Complex Functions , Limits, Continuity, Differentiability
34	19/8/15	Analyticity, Cauchy Riemann Equations
35	21/8/15	Harmonic Functions
36	22/8/15	Milne Thompson Method, Line Integral Evaluation along a path, Indefinite Integration
37	18/8/15, 19/8/15, 21/8/15	Tutorial(G3,G2,G1):Problems on Milne Thompson method
38	1/9/15	Cauchy's Integral Theorem
39	2/9/15	Cauchy's Integral Formula
40	4/9/15	Generalised Integral Formula
		UNIT-IV: Power Series & Contour Integration
41	5/9/15	Radius of Convergence
42	1/9/15, 2/9/15, 4/9/15	Tutorial(G3,G2,G1):Cauchy's Integral Formula
43	8/9/15	Expansion in Taylor's Series
44	9/9/15	Expansion in Maclaurin's & Laurent's series
45	11/9/15	Singular Point, Isolated Singular Point
46	12/9/15	Pole
47	8/9/15, 9/9/15, 11/9/15	Tutorial(G3,G2,G1):Cauchy's Integral Theorem
48	15/9/15	Pole of Order m-Essential Singularity
49	16/9/15	Residue-Evaluation of Residue by Formula
50	18/9/15	Evaluation of Residue by Laurent Series
51	19/9/15	Residue Theorem
52	15/9/15, 16/9/15, 18/9/15	Tutorial(G3,G2,G1):Residue Theorem
53	22/9/15	Problem on Residue Theorem
54	23/9/15	Evaluation of Integral by type $\int f(x)dx$
55	25/9/15	Evaluation of Integral by type $\int f(x)dx$
56	26/9/15	Evaluation of Integral by type $\int f(x)dx$
57	22/9/15, 23/9/15, 25/9/15	Tutorial(G3,G2,G1):Evaluation of Integral by type $\int f(x)dx$
58	29/10/15	Evaluation of Integral by type $\int f(\cos\theta, \sin\theta)d\theta$
59	30/10/15	Evaluation of Integral by type $\int f(\cos\theta, \sin\theta)d\theta$
60	3/10/15	Evaluation of Integral by type $\int f(\cos\theta, \sin\theta)d\theta$
61	29/9/15, 30/9/15	Tutorial(G3,G2,-):Problems on poles

		UNIT-V Conformal Mapping
62	6/10/15	Introduction to Conformal Mapping
63	7/10/15	Standard Transformation
64	9/10/15	Translation
65	10/10/15	Magnification&Rotation
66	6/10/15,7/10/15, 9/10/15	Tutorial(G3,G2,G1):Magnification&rotation
67	13/10/15	Transformation of $\log z$ & z^2
68	14/10/15	Bilinear Transformation & Properties of Bilinear Transformation
69	16/10/15	Determination of Bilinear Transformation when mapping of 3 Points are given
70	17/10/15	Revision
71	13/10/15,14/10/15 ,16/10/15	Tutorial(G3,G2,G1):Bilinear Transformation

Signature