Bhoj Reddy Engineering College for Women: Hyderabad
Department of on Engineering
Lesson plan of faculty member for the academic year 2016–17

Class: I B Tech Branch-Section: EEE Semester: II
Subject: Mathematics –III Lectures per week: 4+1 (Tutorial)

Lecture Number	Topics to be covered	Date (s)
UNIT – I: Random Variables and Distributions		
1	Introduction	04 January 2017
2	Random Variables-Discrete and Continuous	05 January 2017
3	Random Variables-Discrete and Continuous	06 January 2017
4	Mass function, Cumulative Distribution function of a discrete random variable	09 January 2017
5	Tutorial(G1,G2,G3): Problems on Random Variables	09 January 2017
6	Problems on Mass function, Cumulative Distribution function	11 January 2017
7	Problems on Cumulative Distribution function	12 January 2017
8	Mathematical expectation(mean), Variance,S.D (Discrete) & Problems	16 January 2017
9	Problems on Mean, Variance,S.D	16 January 2017
10	Mathematical expectation(mean),Variance,S.D(Continous)	18 January 2017
11	Moment generating function	19 January 2017
12	Tutorial(G1,G2,G3): Problems on Moment generating function	20 January 2017
13	Moments and Properties	23January 2017
14	Discrete Distributions: Binomial Distribution, Mean and Variance of B.D.	23January 2017
15	Geometric Distribution, Mean and Variance of G.D.	25 January 2017
16	Tutorial(G1,G2,G3): Problems on Mean & Variance of Geometric Distribution	27 January 2017
17	Continous Distributions: Normal Distribution	30 January 2017
18	Mean and Variance of N.D	30 January 2017
19	Problems on Normal Distribution	02 February 2017
20	Moment generating functions of B.D, G.D and N.D.	03 February 2017
21	Problems on Moment generating function B.D, G.D and N.D.	06 February 2017
22	Tutorial(G1,G2,G3): Problems on Mgf of B.D, G.D and N.D	06 February 2017
UNIT-II: **Sampling Theory**		
23	Introduction	08 February 2017
24	Sampling distribution of means(σ known)	09 February 2017
25	Population and Samples	10 February 2017
26	Tutorial(G1,G2,G3): Problems on Population and Samples	13 February 2017
27	t-distribution	13 February 2017
28	Sampling distribution of means (σ unknown)	15 February 2017
29	Sampling distribution of means (σ unknown)	16 February 2017
30	Sampling distribution of variances-χ^2 Distribution	17 February 2017
31	Problems on Sampling distribution of means	20 February 2017
32	Tutorial(G1,G2,G3):Sampling distribution of variances-F Distribution	20 February 2017
33	Maximum error of estimate	22 February 2017
UNIT-III: **Tests of Hypothesis**		
34	Introduction to Null, Alternative Hypothesis, Type I error, Type II error	23 February 2017
35	Tutorial(G1,G2,G3): Problems on Type I error, Type II error	27 February 2017

36	Level of Significance, Critical region, Accepted region	01 March 2017
37	One Tail and two Tail tests	01 March 2017
38	Problems on One Tail and two Tail tests	02 March 2017
39	Objective Question Bank	03 March 2017
40	Test concerning one mean	06 March 2017
41	Tutorial(G1,G2,G3): Revision	06 March 2017
42	Problems on Test concerning one mean	08 March 2017
43	Test concerning one Proportion	09 March 2017
44	Problems on Test concerning one Proportion	13 March 2017
45	Tutorial(G1,G2,G3): Test concerning two means and their differences	13 March 2017
46	Problems on Test concerning two means	15 March 2017
47	Test concerning two proportions and their differences	16 March 2017
48	Tutorial(G1,G2,G3): Problems on Test concerning two means & two proportions	17 March 2017
49	Problems on Test concerning two proportions and their differences	20 March 2017
50	Tutorial(G1,G2,G3): Problems	20March 2017
51	ANOVA for one-way classified data	23March 2017
UNIT-IV: **Algebraic and Transcendental Equations**		
52	Solution of Algebraic And Transcendental Equations,	24 March 2017
53	Graphical interpretation of solution of equations	27 March 2017
54	Tutorial(G1,G2,G3): Problems	27 Mar 2017
55	The Bisection Method	30 Mar 2017
56	The Method of False Position	31 Mar 2017
57	The Iteration Method	03 April 2017
58	Tutorial(G1,G2,G3): Problems on Bisection Method	03 April 2017
59	Fixed point Iteration	06 April 2017
60	Newton Raphson Method	07 April 2017
61	Tutorial(G1,G2,G3): Problems on Newton Raphson Method	08 April 2017
62	Solving Linear system of equations by Guass Jacobi	10 April 2017
63	Tutorial(G1,G2,G3): Problems on Guass Jacobi Method	10 April 2017
64	Guass seidal Iteration method	13 April 2017
65	Curve Fitting: Fitting a Linear Curve by method of Least Squares	17 April 2017
66	Tutorial(G1,G2,G3): Problems on Fitting a Linear Curve	17 April 2017
67	Fitting a Second Curve by method of Least Squares	19 April 2017
68	Fitting a Exponential Curve by method of Least Squares	20 April 2017
69	Fitting a Power Curve by method of Least Squares	21 April 2017
70	Revision	24 April 2017
71	Tutorial(G1,G2,G3): Problems on Method of Least Squares	24 April 2017
UNIT –V :Numerical Integration and solution of Ordinary Differential equations		
72	Numerical Integration – Trapezoidal rule Simpson's rule	26 April 2017
73	Problems on Simpson's $1/3^{rd}$ and $3/8^{th}$ rule	27 April 2017
74	Solution of Ordinary Differential Equations by Taylor's Series	28 April 2017
75	Problems on Taylor's Series	01 May 2017
76	Tutorial(G1,G2,G3): Problems on Taylor's Series	01 May 2017
77	Picards method of Succesive Approximation	03 May 2017
78	Picards method of Succesive Approximation	04 May 2017
79	Euler's Method,	05 May 2017
80	Problems on Euler's Method	06 May 2017
81	Runge-Kutta Method second & Fourth order	08 May 2017
82	Tutorial(G1,G2,G3): Revision	08 May 2017

Text Books:

1. “Probability and Statistics for Engineers” by Richard Arnold Johnson&Irwin Miller,
2. “Probability and Statistics”, by TKV Iyengar and B.Krishna Gandhi Et, 2009
3. ”Numerical Methods for Scientific and Engineering Computation”,by M.K Jain & S.R.K.Iyengar, International Publishers.

Name and signature of the faculty: Bushra

Name and signature of Head of the Department: Padma K ----