

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

Class: I B Tech

Branch-Section: ECE-A

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	03 January 2017
2	Random Variables-Discrete and Continuous	04 January 2017
3	Random Variables-Discrete and Continuous	05 January 2017
4	Mass function, Cumulative Distribution function of a discrete random variable	06 January 2017
5	Tutorial(G1,G2,G3): Problems on Random Variables	07 January 2017
6	Problems on Mass function, Cumulative Distribution function	10 January 2017
7	Problems on Cumulative Distribution function	11 January 2017
8	Mathematical expectation(mean), Variance,S.D (Discrete) & Problems	12 January 2017
9	Problems on Mean, Variance,S.D	17 January 2017
10	Mathematical expectation(mean),Variance,S.D(Continuous)	18 January 2017
11	Mathematical expectation(mean),Variance,S.D(Continuous)	19 January 2017
12	Moment generating function	20 January 2017
13	Tutorial(G1,G2,G3): Problems on Moment generating function	21 January 2017
14	Moments and Properties	24 January 2017
15	Discrete Distributions: Binomial Distribution, Mean and Variance of B.D.	25 January 2017
16	Geometric Distribution, Mean and Variance of G.D.	27 January 2017
17	Tutorial(G1,G2,G3): Problems on Mean & Variance of Geometric Distribution	28 January 2017
18	Continuous Distributions: Normal Distribution	31 January 2017
19	Mean and Variance of N.D	01 February 2017
20	Problems on Normal Distribution	02 February 2017
21	Moment generating functions of B.D, G.D and N.D.	03 February 2017
22	Tutorial(G1,G2,G3): Problems on Moment generating function	04 February 2017
23	Problems on Moment generating function	07 February 2017
UNIT-II: Sampling Theory		
24	Introduction	08 February 2017
25	Sampling distribution of means(σ known)	09 February 2017
26	Population and Samples	10 February 2017
27	Tutorial(G1,G2,G3): Problems on Population and Samples	11 February 2017
28	t-distribution	14 February 2017
29	Sampling distribution of means (σ unknown)	15 February 2017
30	Sampling distribution of means (σ unknown)	16 February 2017
31	Sampling distribution of variances- χ^2 Distribution	17 February 2017
32	Tutorial(G1,G2,G3):Problems on Sampling distribution of means	18 February 2017
33	Sampling distribution of variances-F Distribution	21 February 2017
34	Maximum error of estimate	22 February 2017
UNIT-III: Tests of Hypothesis		
35	Introduction to Null, Alternative Hypothesis, Type I error, Type II error	23 February 2017

36	Tutorial(G1,G2,G3): Problems on Type I error, Type II error	25 February 2017
37	Level of Significance, Critical region, Accepted region	28 February 2017
38	One Tail and two Tail tests	01 March 2017
39	Problems on One Tail and two Tail tests	02 March 2017
40	Objective & Question Bank	03 March 2017
41	Revision	04 March 2017
42	Test concerning one mean	09 March 2017
43	Problems on Test concerning one mean	10 March 2017
44	Tutorial(G1,G2,G3): Test concerning one Proportion	11 March 2017
45	Problems on Test concerning one Proportion	14 March 2017
46	Test concerning two means and their differences	15 March 2017
47	Problems on Test concerning two means and their differences	16 March 2017
48	Test concerning two proportions and their differences	17 March 2017
49	Tutorial(G1,G2,G3): Problems on Test concerning two means & two proportions	18 March 2017
50	Problems on Test concerning two proportions and their differences	21 March 2017
51	ANOVA for one-way classified data	22 March 2017
52	Problems	23 March 2017
UNIT-IV: Algebraic and Transcendental Equations		
53	Solution of Algebraic And Transcendental Equations,	24 March 2017
54	Tutorial(G1,G2,G3): Problems	25 March 2017
55	Graphical interpretation of solution of equations	28 March 2017
56	The Bisection Method	30 March 2017
57	The Method of False Position	31 March 2017
58	Tutorial(G1,G2,G3): Problems on Bisection Method	01 April 2017
59	The Iteration Method	04 April 2017
60	Fixed point Iteration	06 April 2017
61	Newton Raphson Method	07 April 2017
62	Tutorial(G1,G2,G3): Problems on Newton Raphson Method	08 April 2017
63	Solving Linear system of equations by Guass Jacobi's Method	11 April 2017
64	Guass Jacobi's Method	12 April 2017
65	Guass seidal Iteration method	13 April 2017
66	Tutorial(G1,G2,G3): Problems on Guass seidal Iteration method	15 April 2017
67	Curve Fitting: Fitting a Linear Curve by method of Least Squares	18 April 2017
68	Fitting a Second Curve by method of Least Squares	19 April 2017
69	Fitting a Exponential Curve by method of Least Squares	20 April 2017
70	Fitting a Power Curve by method of Least Squares	21 April 2017
71	Tutorial(G1,G2,G3): Problems on Method of Least Squares	22 April 2017
UNIT –V : Numerical Integration and solution of Ordinary Differential equations		
72	Numerical Integration – Trapezoidal rule Simpson's rule	25 April 2017
73	Problems on Trapezoidal rule	26 April 2017
74	Problems on Simpson's $1/3^{\text{rd}}$ and $3/8^{\text{th}}$ rule	27 April 2017
75	Solution of Ordinary Differential Equations by Taylor's Series	28 April 2017
76	Tutorial(G1,G2,G3): Problems on Taylor's Series	29 April 2017
77	Solution of Ordinary Differential Equations by Taylor's Series	02 May 2017
78	Picards method of Successive Approximation	03 May 2017
79	Picards method of Successive Approximation	04 May 2017
80	Euler's Method, Runge-Kutta Method second & Fourth order	05 May 2017
81	Tutorial(G1,G2,G3): Problems on Runge-Kutta Method	06 May 2017
82	Revision	09 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.KJain & S.R.K.Iyengar, International Publishers.

Name and signature of the faculty: Bushra ----

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

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Name and signature of the faculty: Bushra

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