



SREE VIDYANIKETHAN ENGINEERING COLLEGE(Autonomous)

Sree Sainath Nagar, A. Rangampet – 517 102

LESSON PLAN cum DAIRY, 2015-16

Name of the Subject: PROBABILITY AND STATISTICS (14BT3BS03)

Class & Semester: II B.Tech I Semester

Name of the faculty Members 1)Dr. K.A.Ajmath
2) Dr. G. Sucharita

Branch: IT

S. No	Topic	No. of periods	Date(s) Covered	No. of Periods Used	Book(s) followed	Topics for self study
UNIT-I: PROBABILITY AND MATHEMATICAL EXPECTATIONS						
1	Probability	1			T1	Permutations and Combination, Addition and Multiplication theorems.
2	Conditional probability	1			T1	
3	Diagnostic Test, Bayes theorem	1			T1	
4	Tutorial - 1	1				
5	Discrete random variables	1			T1	
6	Continuous random variables	1			T1	
7	Distribution function of random variables, Properties	1			T1	
8	Tutorial - 2	1				
9	Probability mass function and density functions.	1			T1	
10	Mathematical expectations: Properties of Mathematical expectations	1			T1	
11	Tutorial - 3	1				
12	mean and variance of mathematical expectations	1			T1	
13	Formative test - 1	1				
Total periods required:		13				
UNIT-II: PROBABILITY DISTRIBUTIONS						
14	Binomial distribution, mean of B.D.	1			T1	
15	Tutorial - 4	1				
16	Problems on B.D	1			T1	
17	Variance, standard deviation of B.D.	1			T1	
18	Poisson distribution, mean of P.D.	1			T1	
19	Tutorial - 5	1				

20	Variance, standard deviations of P.D.	1			T1	
21	Applications of B.D and P.D.	1			T1	
22	Normal Distribution	1			T1	
23	Tutorial - 6	1				
24	Mean, Variance of Normal distribution.	1			T1	
25	Area Properties of Normal distribution curve	1			T1	
26	Formative test - 2	1				
27	Tutorial - 7	1				
Total periods required:		14				
UNIT-III: STATISTICAL QUALITY CONTROL AND CORRELATION AND REGRESSION						
28	Introduction, Advantages and limitations of statistical quality control.	1			T2	
29	Control charts and Specification limits	1			T2	
30	\bar{X} , R Charts.	1			T2	
31	Tutorial - 8	1				
32	p, np Charts	1			T2	
33	C charts.	1			T2	
34	Definition of correlation, correlation coefficient.	1			T2	
35	Tutorial - 9	1				
36	Rank correlation coefficients.	1			T2	
37	Simple linear regression, Regression lines and properties	1			T2	
38	Formative test - 3	1				
39	Tutorial - 10	1				
Total periods required:		12				
UNIT-IV: SAMPLING DISTRIBUTIONS AND TEST OF SIGNIFICANCE FOR LARGE SAMPLES						
40	Population and Sample, Parameter and Statistic.	1			T1	
41	Sampling Distribution of Statistic, Standard Error of Statistic.	1			T1	
42	Null and Alternative Hypotheses, Type I and II errors Degrees of freedom.	1			T1	
43	Tutorial - 11	1				

44	Critical region, Degrees of freedom.	1			T1	
45	Test of Significance for Single Proportion.	1			T1	
46	Test of Significance for Difference of Proportions.	1			T1	
47	Tutorial – 12	1				
48	Test of Significance for a Single Mean.	1			T1	
49	Test of Significance for Difference of Means.	1			T1	
50	Formative test - 4	1				
51	Tutorial - 13	1				
Total periods required:		12				
UNIT-V: TEST OF SIGNIFICANCE FOR SMALL SAMPLES						
52	Student's t-test for single mean	1			T1	
53	Student's t-test for difference of mean	1			T1	
54	F-test for equality of population variance.	1			T1	
55	Tutorial -14	1				
56	Chi-square Test for Goodness of Test.	1			T1	
57	Chi-square Test for contingency table.	1			T1	
58	Chi-square Test for Independence of Attributes.	1			T1	
59	Tutorial -15	1				
60	Formative test - 5	1				
Total periods required:		09				
Grand total periods required:		60				

TEXT BOOKS:

T1. T.K.V. Iyengar, B. Krishna Gandhi ..etal., Probability and Statistics, S. Chand & Company, Thrid Edition (2011).

T2. S.P.Gupta, Statistical Methods, Sultan and Chand, New Delhi, Thirty Fourth edition (2005).

REFERENCE BOOKS:

R1. Shahnaz Bathul, A text book of Probability and Statistics, Ridge Publications, Second Edition,

R2 S.C.Gupta and V.K.Kapoor , Fundamentals of Applied Statistics, Sultan and Chand, New Delhi.(1998).

**Signature of the
faculty**

**Signature of the
Course coordinator**

**Signature of the
HOD**