Lesson Plan

Name of the Faculty: Dr. A. K. Gupta

Discipline : Applied Sciences & Humanities

Semester : 2nd

Subject: Probability & Statistics (BS-134A) (CSE) Lesson Plan Duration: 15 Weeks (from Jan - April, 2020)

Work Load: Lecture: 03, Tutorials: 01 per week

Week	Theory		
	Lecture	Topic(including assignment /test)	
	Day		
1 st	1 st	Measure of central tendencies, A. Mean	
	2 nd	Geometric & Harmonic mean	
	3 rd	Median & Quantities	
2 nd	4 th	Mode, Measures of dispersion (Concept)	
	5 th	Mean Deviation	
	6 th	Standard deviation. Coefficient & variation	
3 rd	7 th	Moments	
	8 th	Skewness and Kurtosis,	
	9 th	Correlation, Coefficient of correlation,	
4 th	10 th	Rank correlation.	
	11 th	Lines of regression	
	12 th	Properties	
5 th	13 th	Test	
	14 th	Probabilities, Additive law, Independent Events	
	15 th	Mutually Exc. Events, Conditional Probability	
6 th	16 th	Problems	
	17 th	Bayes' Theorem.	
	18 th	Random Variables: Discrete random variables	
7^{th}	19 th	Probability distribution and mass function	
	20 th	Expectation, Moments	
	21 st	Variance and standard deviation of Disc. variables.	
8 th	22 nd	Test	
	23 rd	Continuous random variables	
	24 th	Probability distribution and density function	
9 th	25 th	Expectation, Moments	
	26 th	Variance and standard deviation of Continuous random variables.	
	27 th	Binomial distributions:	
10 th	28 th	Properties of parameters	
	29 th	Poisson distributions	
	30 th	Properties of parameters	
11 th	31 st	Normal distributions	
	32 nd	Properties of parameters	
	33 rd	Test	
12 th	34 th	Curve fitting, Fitting a straight line	
	35 th	Fitting of second degree curve,	

	36 th	Fitting of higher degree polynomial,
13 th	37 th	Fitting of an exponential curve of the form $y = ab^x$. & $y = ax^b$
	38 th	Concept of Testing of hypothesis, Errors
	39 th	Large sample test, Z Test
14 th	40 th	Test for properties, single mean,
	41 st	Test of difference of means
	42 nd	Small Sample test, T- Test
15 th	43 rd	X ² Test (Chi-square test)
	44 th	Problems
	45 th	Test

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