

## LESSON PLAN

Subject Code & Name: 23BIT212,

Statistical Methods

Branch/Semester: II-CSD-I

Faculty Name: Mr. Arun Kumar

A.Y:

Contact Hour (Cumulative)	Unit No	Topic	Teaching Methodology
1(1)	1	Random Variables, definition and types with examples	BB
6(2)	1	Concept of probability mass function and distribution functions and its properties	BB
3(3)	1	Problems on probability mass function and distribution functions	BB
5(4)	1	probability density function and distribution function and its properties and Expectation and its properties	BB
1(5)		Problems on probability density function and distribution functions	BB
6(6)	1	Concept of Binomial distribution and its properties, examples	BB
3(7)	1	Concept of expected value, variance and mode, mgf of Binomial distribution	BB
5(8)	1	Problems on Binomial distribution	BB
1(9)	1	Problems on fit a Binomial distribution	BB
6(10)	1	Concept of Poisson distribution and its properties, examples	BB
3(11)	1	Concept of expected value, variance and mode, mgf of Poisson distribution	BB
5(12)	1	Problems on Poisson distribution	BB
1(13)	1	Problems on fit Poisson distribution	BB
6(14)	1	Introduction to Normal distributions and its properties,	BB
3(15)	1	Properties of Normal distribution	BB
5(17)	1	Properties of Normal distribution and its problems	BB
1(18)	1	Problems on normal distribution	BB
6(19)	1	Problems on normal distribution	BB
3(20)	1	Normal approximation to Binomial distribution, problems on normal distribution	BB

		Introduction to Sampling theory and its concepts	BB
5(21)	II	Concept and problems on Sampling distribution of means ( $\sigma$ known)	BB
1(22)	II	Problems on Sampling distribution of means ( $\sigma$ known)	BB
6(23)	II	Concept of Central limit theorem and its applications and its problems	BB
3(24)	II	Problems on Central limit theorem	BB
5(25)	II	Problems on sampling distribution of sums and differences	BB
1(26)	II	Concept of Point estimation- Maximum error of estimate - Interval estimation.	BB
6(27)	II	Problems on maximum error and interval estimation. confidence interval	BB
3(28)	III	Concept of Testing of hypothesis for Large samples	BB
5(29)	III	Concepts One tail and two-tail and procedure of testing hypothesis	BB
1(30)	III	Tests concerning single mean by z test and its problems	BB
6(31)	III	Tests concerning two means by z test and its problems	BB
3(32)	III	Tests concerning two means by z test and its problems	BB
5(33)	III	Tests concerning single proportion by z test and its problems	BB
1(34)	III	Tests concerning two proportions by z test and its problems	BB
6(35)	III	Tests concerning one and two proportions by z test and its problems	BB
3(36)	IV	Testing of hypothesis for Small samples, Tests concerning one mean by t test and its problems	BB
5(37)	IV	Tests concerning two means by t test and its problems	BB
1(38)	IV	Tests concerning two of means by t test and its problems	BB
6(39)	IV	Tests concerning of F-test for equality of population variances and its problems	BB
3(40)	IV	Tests concerning goodness of fit by $\chi^2$ test and its problems	BB
5(41)	IV	Tests concerning goodness of fit by $\chi^2$ test and its problems	BB
1(42)	IV	Tests concerning independent of attributes by $\chi^2$ test and its problems	BB
6(43)	IV	Tests concerning independent of attributes by $\chi^2$ test and its problems	BB
3(44)	IV	Tests concerning independent of attributes by $\chi^2$ test and its problems	BB



5(45)	IV	Concept and problems of ANOVA one-way classification	1313
1(46)	IV	Problems of ANOVA one-way classification	1313
6(47)	IV	Concept and problems of ANOVA two-way classification	1313
3(48)	IV	Problems of ANOVA two-way classification	1313
5(49)	V	Concept of correlation and its types, examples	1313
1(50)	V	Methods of correlation and its properties, problems	1313
6(51)	V	Rank Correlation Coefficient and its problems	1313
3(52)	V	Regression and its types-Linear regression and its properties	1313
5(53)	V	Regression coefficients and its properties, angle between them and its problems	1313
1(54)	V	Problems on regression analysis and regression coefficients	1313

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4/3/25