

Teaching Plan: STA002

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Session: Jan--May

Syllabus	Period		Method (including experiential- E /participative learning-P)	Aids Used	Assessment method
Unit I PS	Jan	Definition, scatter diagram, Karl Pearson's correlation coefficient and its properties,.	<ul style="list-style-type: none"> • Lecture, • Oral question-P • problem solving- E 	Blackboard/ Chalk	Class test, Sessional Test, Oral quiz
Unit II PS,RS	Feb	Simple linear regression, principle of least squares	<ul style="list-style-type: none"> • Lecture, • Oral question-P • problem solving- E 	Blackboard/ Chalk	
		Rank correlation, correlation ratio.	<ul style="list-style-type: none"> • problem solving- E 		
	March	partial and multiple correlation (3 variables only)	<ul style="list-style-type: none"> • Lecture, • Oral question-P • problem solving- E 	Blackboard/ Chalk	
Unit II PS	April	principle of least squares.	<ul style="list-style-type: none"> • Oral question-P • problem solving- E 	Blackboard/ Chalk	
Unit I, II	May	Simple linear regression, Revision	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	ICT	
Unit III RS	Jan	Binomial, Poisson distribution, Fitting of these distributions.	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	Blackboard/ Chalk	

	Feb	Uniform, Normal. Fitting of these distributions.	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	Blackboard/ Chalk
	March	Null and alternative hypotheses, level of significance, Type I and Type II errors, their probabilities and critical region, size and power, Large sample tests, single mean, difference of two means	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	Blackboard/ Chalk
	May	t – test for testing single mean, difference of two means, paired t test, Revision	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	Blackboard/ Chalk
Unit IV JK	Jan	Definition, Operators Δ & E, their properties, Difference table, missing terms, Interpolation: Definition, Newton's Forward and Backward interpolation formula	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	Blackboard/ Chalk
	Feb	Gauss Interpolation formula. Divided Difference (DD): Definition, DD table, Newton's DD formula.	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	Blackboard/ Chalk
	March	Numerical Integration: Introduction, General quadrature formula, Trapezoidal, Simpson's 1/3rd & 3/8th rules	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	Blackboard/ Chalk
	April	Newton-Raphson method	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	ICT
	May	Chi- square Test, Revision	<ul style="list-style-type: none"> • Lecture, • Oral question-P problem solving 	Blackboard/ Chalk