

DEPARTMENT OF STATISTICS

HANDIQUE GIRLS' COLLEGE

COURSE OUTCOME FOR 2ND AND 4TH SEMESTERS (JAN 2025-MAY 2025)

SEMESTER	PAPER CODE	PAPER NAME	COURSE OUTCOME
II	STA 201 (for both major and minor)	Correlation & Regression, Probability Distributions, Statistical Inference-I & Finite Differences	The course will expose the students to the need and nuances of correlation and basic probability distributions along with notions of uncertainty, random variables, etc. At the end of the course, students will be able to apply the tools of correlation and model building in data analysis along with learning the use of basic probability distributions.
IV	STA401 (major)	Probability-2 & Probability Distributions-2	At the end of the course, students shall be able to appreciate the large sample implications of various statistical measures and also learn about a number of statistical distributions. They will be able to determine whether or not moments exist and determine them. They will be able to use tools like probability generating function and moment generating function in addition to learning several univariate discrete and continuous distributions and their characterisations.
	STA402 (major)	Mathematical Models	At the end of the course, students shall be able to use the mathematical results of calculus and algebra to study different distributions.
	STA403 (major)	Linear Algebra and System of Equations	At the end of the course, students shall be able to explain and solve numerical problems based on basics of matrices in addition to solving systems of linear equations.
	STA404 (major)	Practical 4	At the end of the course, students shall be able to apply mathematical techniques to practical situations.
	STA407 (minor)	Probability-2 & Probability Distributions-2	Define the concepts of two-dimensional random variables, joint, marginal and conditional distributions, independence of variables. Classify two-dimensional variables and explain their properties. Explain Chebyshev's lemma, WLLN, and apply these ideas to numerical problems. Illustrate various probability distributions, their properties and limiting cases and utilise these ideas to solve numerical problems.

