



গড়গাঁও মহাবিদ্যালয়

GARGAON COLLEGE

NAAC accredited with 'B' Grade

TEACHING PLAN
DEPARTMENT OF STATISTICS
JULY 2022 - JUNE 2023



Period of Semester	Semester	Tentative Date of Univ Exam (Notification of Dib, Univ.)	Name of the Faculty	Course Code STAT-	Paper Name	Unit wise Title of the Topic	Number of Lectures (1 Hour per Lecture) Theory-TH Practical-P Seminar-S Group Discussion-GD Tutorial-TU Surprized Test-ST	Tools used for teaching Black Board-BB ICT Online Class-OC Google Meet-GM Google Classroom-GC
July-22-December,22	Sem-I		Dr. Ranjana Gogoi	C1	Descriptive Statistics	Unit1-Statistical Methods	TH-10, P-1 TU-1, ST-1	BB, ICT, OC
						Unit2-Measures of Central Tendency	TH-20, P-4, S-1, TU-2, ST-1	BB, ICT, GC, OC
						Unit3- Correlation, Regression	TH-10, P-8, S-1, TU-1	BB, ICT, GC, OC
						Unit4- Index Numbers	TH-10, P-3, TU-1, ST-1	BB, ICT, GC
			Dr. Bornali Dutta	C2	Calculus	Unit1-Differential Calculus	TH-10, S-1, TU-2,ST-1	BB, GM,GC,
						Unit2- Integral Calculus	TH-9, S-1, TU-2,ST-2	BB,OC,GM,GC
						Unit3- Differential Equations	TH-9, S-1, TU-2,ST-1	BB,GM,GC,ICT
						Unit4-Partial Differential Equations	TH6-, S-1, TU-1,ST-1	BB,GM,GC,ICT
			Dr. Ranjana Gogoi	GE1	Statistical Methods	Unit1-Introduction	TH-10, TU-1, ST-1	BB, ICT, OC
						Unit2-Measures of Central Tendency	TH-16, P-4, S-1, TU-2	BB, ICT, GC, OC
						Unit3- Correlation, Regression	TH-16, P-7, S-1, TU-2	BB, ICT, GC, OC
						Unit4-Theory of Attributes	TH-8, P-1, TU-1, ST-1	BB, ICT, GC
January,2023-June,2023	Sem II		Dr. Ranjana Gogoi	C3	Probability and Probability Distribution	Unit1-Probability	TH-10, TU-1, ST-1	BB, ICT, OC
						Unit2-Random Variables	TH-10, S-1, TU-2, ST-1	BB, ICT, GC, OC
						Unit3-Mathematical Expectation	TH-10, S-1, TU-2, ST-1	BB, ICT, GC, OC
						Unit4-Probability Distributions	TH-15, P-15, TU-2	BB, ICT, GC
			Dr. Bornali Dutta	C4	Algebra	Unit1-Theory of Equations	TH-8L,TU-2,ST-2,S-1	BB, ICT, GC, OC
						Unit2- Algebra of Matrices	TH-6,TU-1,ST-1,S-1	BB, ICT, GC,GM
						Unit3-Determinants of Matrices	TH-14,TU-3,ST-2,S-1	BB, ICT, GC,GM
						Unit4-Rank of Matrix	TH-6,TU-1,ST-2,S-1	BB, ICT, GC,GM
			Dr. Ranjana Gogoi	GE2	Introductory	Unit1-Probability	TH-15, TU-2	BB, ICT, OC
						Unit2-Random Variable, Math. Expectation	TH-10, S-1, TU-1, ST-1	BB, ICT, GC, OC



			Gogoi		Probability	Unit3-Convergence in Probability Unit4-Probability Distribution	TH-10, TU-1, S-1, ST-1 TH-15, P-12, TU-2, ST-1	BB, ICT, GC, OC BB, ICT, GC
July,2022-December,2022	SEM III		Dr. Bornali Dutta	C5	Sampling Distributions	Unit1-Limit Laws	TH-6,TU-1,S-1,ST-1	BB, ICT, GC, OC
						Unit2-Introduction to Sampling Distribution	TH-8,TU-1,S-1,ST-1,P-7	BB, ICT, GC, OC,GM
						Unit3-Exact Sampling Distribution	TH-6,TU-1,S-1,ST-1,P-3	BB, ICT, GC, OC
						Unit4-Exact Sampling Distribution	TH-6,TU-1,S-1,ST-1	BB, ICT, GC, OC
			Dr. Ranjana Gogoi	C6	Survey Sampling & Indian Official Statistics	Unit1- Simple Random Sampling	TH-8, TU-1, P-4, S-1	BB, ICT, OC
						Unit2-Stratified Random Sampling	TH-8, S-1, TU-1, P-3, ST-1	BB, ICT, GC, OC
						Unit3-Ratio & Regression Method of Estimation	TH-5, TU-1, S-1, GD-1, P-2	BB, ICT, GC, OC
						Unit4-Indian Official Statistics	TH-5, P-12, TU-1, ST-1	BB, ICT, GC
			Dr. Bornali Dutta	C7	Mathematical Analysis	Real Analysis	TH-8,TU-1,ST-1	BB, ICT, GC, OC,GM
						Infinite Series	TH-8,TU-1,ST-1	BB, ICT, GC, OC
						Review of limit	TH-4, TU-1,ST-1	BB, ICT, GC, OC,GM
						Numerical Analysis	TH-6,TU-1,ST-1,S-1	BB, ICT, GC, OC,GM
Dr. Ranjana Gogoi	GE3	Sample Survey	Unit1- Concept of Population and Sample	TH-5, TU-1, S-1, ST-1	BB, ICT, GC, OC			
			Unit2-Bsic methods of sampling	TH-6, S-1, TU-2, P-1	BB, ICT, GC, OC			
			Unit3-Staratified Random Sampling	TH-, TU-1, S-1	BB, ICT, GC, OC			
			Unit4- Multistage, Multi phase sampling, NSSO, CSO etc.	TH-15, P-12, TU-2	BB, ICT, GC, OC			
January,2023-June,2023	SEM IV		Dr. Bornali Dutta	C8	Statistical Inference	Unit1-Basic concepts of Estimation	TH-8,TU-1,S-1,ST-1	BB, ICT, GC, OC
						Unit2-Methods of estimation	TH-4,TU-1,ST-1,P-4	BB, ICT, GC, OC
						Unit3-Principles of test of significance	TH-8,TU-1,ST-1,P-4	BB, ICT, GC, OC,GM
						Unit4-Sequential Analysis	TH-6,TU-1,ST-1,P-3	BB, ICT, GC, OC
			Dr. Ranjana Gogoi	C9	Linear Models	Unit1-Gauss Markov Set Up	TH-15, TU-2	BB, ICT, GC, OC
						Unit2-Regression Analysis; SLRM, MLRM	TH-10, S-1, TU-1, ST-1	BB, ICT, GC, OC
						Unit3- Analysis of Variance	TH-10, TU-1, S-1, ST-1	BB, ICT, GC, OC
						Unit4-Model Adequacy Checking	TH-15, P-12, TU-2	BB, ICT, GC, OC,GM
				C10	Statistical	Unit1- Quality, Historical perspectives	TH-6, TU-2, GD-1	BB, ICT, GC, OC,GM
						Unit2- Control Chart	TH-10, S-1, TU-2, ST-1	BB, ICT, GC, OC, GM



July,2022-December,2022	SEM V	Dr. Ranjana Gogoi	Quality Control	Unit3- Acceptance Sampling Plan	TH-10, TU-1, S-1, ST-1	BB, ICT, GC, OC, GM	
				Unit4- Six Sigma Methodology	TH-10, P-12, TU-2, ST-1	BB, ICT, GC, OC, GM	
		Dr. Bornali Dutta	GE4	Basics of Statistical Inference	Unit1-Sampling distribution	TH-7,TU-2,ST-2,P-3	BB, ICT, GC, OC,GM
					Unit2-Test for the significance	TH-4,TU-1,ST-1,P-3	BB, ICT, GC, OC,GM
					Unit3-Nonparametric test	TH-4,TU-1,ST-1,P-3	BB, ICT, GC, OC,GM
					Unit4-Analysis of Variance	TH-7,TU-2,ST-2,P-4	BB, ICT, GC, OC,GM
		Dr. Bornali Dutta	C11	Stochastic Processes & Queuing Theory	Unit1- Probability Distribution	TH-5,TU-1,ST-1	BB, ICT, GC, OC,GM
					Unit2- Markov Chains	TH-9,TU-2,ST-2,S-1,P-5	BB, ICT, GC, OC,GM
					Unit3- Poisson Process	TH-6,TU-1,ST-1,S-1,P-3	BB, ICT, GC, OC,GM
					Unit4- Queuing System	TH-6,TU-1,ST-1,GD-1,P-2	BB, ICT, GC, OC,GM
		Dr. Bornali Dutta	C12	Statistical Computing using C++	Unit1-History and importance of C Operators and Expressions	TH-9,TU-2,ST-2,S-1	BB, ICT, GC, OC,GM
					Unit2-Decision making and branching	TH-6,TU-1,ST-1,P-2	BB, ICT, GC, OC,GM
Unit3-User defined functions	TH-6,TU-1,ST-1,P-3				BB, ICT, GC, OC,GM		
Unit4-Pointers	TH-6,TU-1,ST-1,GD-1,P-3				BB, ICT, GC, OC,GM		
Dr. Ranjana Gogoi	DSE2	Time Series Analysis	Unit1-Introduction and Decomposition of Time Series	TH-6, TU-2	BB, ICT, GC, OC,GM		
			Unit2- Detrending, Seasonal Component	TH-8, S-1, TU-2, P-3	BB, ICT, GC, OC, GM		
			Unit3- Seasonal Component	TH-8, TU-1, S-1, P-5	BB, ICT, GC, OC,GM		
			Unit4-Random Component	TH-4, P-2, TU-1, ST-1	BB, ICT, GC, OC,GM		
Dr. Ranjana Gogoi	DSE4	Demography & Vital Statistics	Unit1- Population Theories	TH-6, TU-2	BB, ICT, OC, GC, GM		
			Unit2-Measurement of Mortality	TH-8, S-1, TU-2, P-4	BB, ICT, GC, OC,GM		
			Unit3-Central Mortality Rate, Life Table	TH-8, TU-1, S-1, P-3	BB, ICT, GC, OC,GM		
			Unit4-Measurement of Fertility, NRR, GRR	TH-8, P-12, TU-2, P-4	BB, ICT, GC, OC,GM		
January,2023-June,2023	SEM VI	Dr. Bornali Dutta	C13	Design of Experiments	Unit1-Experimental Designs & Basic designs	TH-7,TU-2,ST-1,P-6	BB, ICT, GC, OC,GM
					Unit2-Incomplete Block Designs	TH-4,TU-1,ST-1,P-1	BB, ICT, GC, OC
					Unit3-Factorial Experiments	TH-7,TU-2,ST-1,P-2,S-1	BB, ICT, GC, OC
					Unit4-Fractional Factorial Experiments	TH-6,TU-2,P-4,ST-2	BB, ICT, GC, OC,GM

		Dr. Bornali Dutta	C14	Multivariate Analysis 7 Nonparametric Methods	Unit1-Bivariate Normal Distribution	TH-5,TU-1,ST-1,P-2	BB, ICT, GC, OC,GM	
					Unit2-Multivariate Normal Distribution & its properties	TH-6,TU-2,ST-2,P-3	BB, ICT, GC, OC,GM	
					Unit3-Application of Multivariate Analysis	TH-6,TU-2,P-3,S-1	BB, ICT, GC, OC,GM	
					Unit4-Nonparametric tests	TH-6,TU-2,ST-2,P-4	BB, ICT, GC, OC,GM	
		Dr. Ranjana Gogoi	DSE3	Econometrics	Unit1-Econometric Model, GLM	TH-8, TU-2, P-3	BB, ICT, OC, GM, GC	
					Unit2-Multicollinearity	TH-8, S-1, TU-2, P-2, ST-1	BB, ICT, GC, GM	
					Unit3-GLS, Autocorrelation	TH-8, TU-1, S-1, P-2, ST-1	BB, ICT, GC,GM	
					Unit4-Heteroscedasticity	TH-8, P-12, TU-2, P-1	BB, ICT, GC, OC,GM	
		Dr. Ranjana Gogoi Dr. Bornali Dutta	DSE8	Project Work	Preparation of Questionnaire, Data Collection, Tabulation, Analysis, Report Writing			ICT, Extensive Library Work, Computational Software, MS Word, MS Excel etc.

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