



গড়গাঁও মহাবিদ্যালয় GARGAON COLLEGE

TEACHING PLAN
DEPARTMENT OF STATISTICS
JULY 2020 - JUNE 2021



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,20-December,20	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
			Ms. 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,2021 - June,2021	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	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	TH-10, TU-1, S-1, ST-1	BB, ICT, GC, OC
						Unit4-Probability Distribution	TH-15, P-12, TU-2, ST-1	BB, ICT, GC
July, 2020-December, 2020	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-Basic methods of sampling	TH-6, S-1, TU-2, P-1	BB, ICT, GC, OC
						Unit3-Stratified 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, 2021- June, 2021	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



			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
July,2020-December,2020	SEM V		Ms. Bornali Dutta	STSM-501	Estimation	Unit1- Basic concept of point estimation	TH-6, TU-2, GD-1	BB, ICT, GC, OC,GM
						Unit2- Methods of Estimation	TH-10, S-1, TU-2, ST-1	BB, ICT, GC, OC,GM
						Unit3- Interval Estimation	TH-10, TU-1, S-1, ST-1	BB, ICT, GC, OC,GM
			Ms. Bornali Dutta	STSM-502	Testing of Hypothesis	Unit1-Basic concept of hypothesis testing	TH-7,TU-2,ST-2,P-3	BB, ICT, GC, OC,GM
						Unit2-Test of 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
			Dr. Ranjana Gogoi	STSM-503	Sample Survey	Unit1- Basic concept of population & sample	TH-5,TU-1,ST-1	BB, ICT, GC, OC,GM
						Unit2- Simple random sampling	TH-9,TU-2,ST-2,S-1	BB, ICT, GC, OC, GM
						Unit3- Stratified Random Sampling	TH-6,TU-1,ST-1,S-1	BB, ICT, GC, OC,GM
						Unit4- Systematic Sampling	TH-6,TU-1,ST-1,GD-1	BB, ICT, GC, OC,GM
			Ms. Bornali Dutta	STSM-504	Practical	1. Tests for proportions	P-4	BB, ICT, OC, GC, GM
						2. Test based on t, F and chi-square	P-6	BB, ICT, GC, OC,GM
						3. Non parametric test	P-6	BB, ICT, GC, OC,GM
4. Goodness of fit test	P-2	BB, ICT, GC, OC,GM						
5. Drawing of power curve	P-5	BB, ICT, GC, OC,GM						
6. Drawing of random sample using random number tables	P-6	BB, ICT, GC, OC,GM						
7. Analysis of data using simple random sampling, stratified random sampling, systematic sampling								
Januar y,2021	SEM VI		Bornali Dutta	STSM-601	Design of Experiments	Unit1- Linear Estimation	TH-6, TU-2	BB, ICT, GC, OC,GM
						Unit2-Principles of design of experiments	TH-8, S-1, TU-2, P-4	BB, ICT, GC, OC
						Unit3-Factorial Experiments ,Split plot experiments	TH-8, TU-1, S-1, P-3	BB, ICT, GC, OC



	Dr. Ranjana Gogoi	STSM-602	Applied Statistics	Unit1-Time Series Analysis	TH-7,TU-2,ST-1,P-6	BB, ICT, GC, OC,GM
				Unit2-Index Numbers	TH-4,TU-1,ST-1,P-1	BB, ICT, GC, OC,GM
				Unit3-Mathematical Economics & Econometrics	TH-7,TU-2,ST-1,P-2,S-1	BB, ICT, GC, OC,GM
				Unit4-Demography	TH-6,TU-2,P-4,ST-2	BB, ICT, GC, OC,GM
	Ms. Bornali Dutta	STSM-603	Practical	<ol style="list-style-type: none"> 1. Problem based on ANOVA 2. Problems based on CRD, RBD& LSD 3. Problems based on factorial experiment 4. Problems based on confounding 5. Problems based on measurement of trend 6. Construction of Laspeyre's, Paashe's, Marshall Edgeworth and Fisher Index number 7. Calculation of birth and death rates: Crude and Standardized. 8. Calculation of general and total fertility 9. Construction of variable and attribute control chart. 10. Drawing OC, ASN,AOQ and ATI Curves of single sapling plan by attribute 	P-25	BB, ICT, OC, GM, GC
	Dr. Ranjana Gogoi Ms. Bornali Dutta	STSM-604	Project Work	Preparation of Questionnaire, Data Collection, Tabulation, Analysis, Report Writing		ICT, Extensive Library Work, Computational Software, MS Word, MS Excel etc.