Semester Lecture Plan

Name of the college: Government college of Arts Science and Commerce, Sankhali						
	Serence and Commerce gamman					
Name of Faculty: Ms. Nirmiti Shankar Naik	Subject: Statistical Methods Using R/SPSS/PSPP					
Paper code: MAT - 142	Program/Course: FY B.Sc.	Division:				
Academic year: 2024- 2025	Semester:II	Total Lectures: 60				
Course Objectives:						
To make students aware of various statistical m	ethods that can be employed in data analysis, hypothesi	s testing and research.				
Expected course Outcome:						
On successfully completing the course a student	will have knowledge about:					
1. Calculate measures of central tendencies	and dispersion along with graphical representations.					
2. Correlation and regression analysis. 3. Solve problems in Probability theory						
4. Understand testing of hypothesis.						
5. Demonstrate based on various statistical tests using statistical software.						
Student learning outcome: The student will be able to,						
1. Calculate measures of central tendencies and variations.						
2. Interpret data and graphically represent it.						
5. Analyze correlation and regression.						
 5. Understand testing of hypothesis and various other tests like large sample test, parametric tests ate 						

- 5. Understand testing of hypothesis and various other tests like large sample test, parametric tests etc.6. Demonstrate and infer based on various statistical tests using statistical software.

Month	Lect From:	tures To:	No. of lecture s allotted	Topic, Subtopic to be covered	Exercises/ assignment	ICT Tools	Reference books
December	9/12/2024	14/12/2024	4	Importing data from CSV or Excel file.		Smarboard chalkboard Software(spss)	
				Data entry in R/SPSS/PSPP.	Software		
December	16/12/2024	21/12/2024	Liberat ion Day	Nil			
January	02/01/2025	04/01/2025	-	Nil			
January	06/01/2024	11/01/2024	4	Finding measures of central tendency namely mean, median and mode	Problem	Chalkboard Smart board Software(spss)	 S. C. Gupta: Fundamentals of Statistics, 7 th Edition, Himalaya Publishing House, 2018. S.C. Gupta & V.K. Kapoor: Fundamentals Of Mathematical Statistics, 12th edition

January	13/01/2025	18/01/2025	4	Finding measures of dispersion, namely, range, quartile deviation, mean deviation and standard deviation using Software	Problem solving		S. C. Gupta: Fundamentals of Statistics, 7 th Edition, Himalaya Publishing House, 2018.
January	20/01/2025	25/01/2025	4	Graphical representations and their interpretations. Skewness and Kurtosis	Assignment Software Problem solving	Chalkboard Smart board	 S.C. Gupta & V.K. Kapoor: Fundamentals Of Mathematical Statistics, 12th edition S. C. Gupta: Fundamentals of Statistics, 7 th Edition, Himalaya Publishing House, 2018.
January - February	27/01/2024	01/02/2025	4	Analyzing correlation and regression.	Software Problem solving	Software(spss)	S.C. Gupta & V.K. Kapoor: Fundamentals Of Mathematical Statistics, 12th edition
February	03/02/2025	08/02/2025	4	Theory of Probability	Software Problem solving	Chalkboard Software(spss)	1)S. C. Gupta: Fundamentals of Statistics, 7 th Edition, Himalaya Publishing House, 2018.

							2) S.C. Gupta & V.K. Kapoor: Fundamentals Of Mathematical Statistics, 12th edition
February	10/02/2025	15/02/2025	4			Chalkboard Smart board	1)S. C. Gupta: Fundamentals of Statistics, 7 th Edition, Himalaya Publishing House, 2018.
				Random Variables	Problem		2) S.C. Gupta & V.K. Kapoor: Fundamentals Of Mathematical Statistics, 12th edition
February	17/02/2025	22/02/2025	4	Theoretical Distributions :		Chalkboard Smart board Software(spss)	 1)S. C. Gupta: Fundamentals of Statistics, 7 th Edition, Himalaya Publishing House, 2018. 2) S.C. Gupta & V.K. Kapoor: Fundamentals Of Mathematical
				problem solving manually	Problem solving		Statistics, 12th edition

February	24/02/2025	01/03/2025	4				S.C. Gupta &
- March						Software(spss)	V.K. Kapoor:
							Fundamentals
					T (Of
				Theoretical Distributions :	Test		Mathematical
				problem solving using Software	Problem		Statistics, 12th
				F	solving		edition
March	03/03/2025	08/03/2025	4				S. C. Gupta:
						Smart board	Fundamentals of
				Testing of hypothesis for single			Statistics, 7 th
				mean and difference of means	G (4		Edition,
				using independent t- test and	Software		Himalaya
				paired t-test.	Problem		Publishing
				F	solving		House, 2018.
March	10/03/2025	15/03/2025	4				S.C. Gupta &
		Holi				Smart board	V.K. Kapoor:
						Software(spss)	Fundamentals
							Of
				Testing of hypothesis for more	Software		Mathematical
				than two means using ANOVA	Problem		Statistics, 12th
				than two means using mooth	solving		edition
March	17/03/2025	22/03/2025	4				S. C. Gupta:
						Software(spss)	Fundamentals of
							Statistics, 7 th
				Testing of hypothesis regarding	m (Edition,
				independence of attributes using	Test		Himalaya
				Chi square test	Problem		Publishing
					solving		House, 2018.
March	24/03/2025	29/03/2025	4	Testing the hypothesis stating			S.C. Gupta &
				that the k independent samples		Smart board	V.K. Kapoor:
				have been drawn from the		Software(spss)	Fundamentals
				nonulations which have identical			Of
				populations which have identical	Software		Mathematical
				distributions using Kruskal	Problem		Statistics, 12th
				Wallis test.			edition
					solving		

March - April	31/03/2025	05/04/2025 Gudi Padva, Id	4	Mann Whitney test	Software Problem solving	Software(spss)	
April	07/04/2025	11/04/2025	4	Working with questionnaires for understanding the collected data and their analysis.	Software Problem solving	Chalkboard Smart board Software(spss)	

* Assessment Rubrics

Component	Max Marks
ISA 1	5
ISA 2	5
ISA 3	5
Project	-
Semester End	
Exam	40