Academic Year 2024-2025
Monthly Teaching Plan
Semester I

Subject: Statistics
Paper No.: I and II (Theory)

Class: B.Sc. I
Month: August

Date	Unit and Subunits	Teaching method and Aids
01/08/2024	S.D. & its properties	**Teaching method**
02/08/2024	C.V. and Examples	Lecture,
05/08/2024	**Unit 2.3: Moments, Skewness and Kurtosis:** Raw & Central Moments	Inductive
07/08/2024	Relation between moments and Sheppard's corrections.	Deductive
08/08/2024	Skewness its types, measures and Examples	Review lesson
09/08/2024	Kurtosis its types, measures and Examples & Problems	Problem Solving
12/08/2024	Problems	Drill-lesson
14/08/2024	**Paper II : Elementary Probability Theory** **Unit 1.1: Sample space and events** Experiment and Random experiment	Analytic **Teaching** Aids
16/08/2024	Types of Sample space	Compute
19/08/2024	Types of Events	LCD
21/08/2024	Algebra of Events	
22/08/2024	Power Set	PPT
23/08/2024	Symbolic representation	Google Classroom
26/08/2024	**Unit 1.2 Probability:** Equally likely events and apriori definition	YouTube
28/08/2024	Basic Problems on probability	
29/08/2024	Definition of probability in terms of odd ratio	
30/08/2024	Problems on probability	

No. of periods / Lectures					Action Taken
Planed	Missed	Extra taken	Actual taken	Syllabus Remaining	Completed as Per plan
17	01	01	17	00 lecture	

DEPARTMENT OF STATISTICS
Balasahed Desai College, Patan,
Tal. Patan, Dist. Satara

Academic Year 2024-2025
Monthly Teaching Plan
Semester III

Subject: Statistics   **Class: B.Sc. II**
Paper No.: V and VI (Theory)   **Month: August**

Date	Unit and Subunits	Teaching method
02/08/2024	**Exponential Distribution :** Definition, mean, variance, C.V., c.d.f, median, quartiles,m.g.f., c.g.f.	**Teaching method**
03/08/2024	moments, Cumulants, , lack of memory property	Lecture,
05/08/2024	distribution of $-\theta \times \log_e(X)$, where $X \sim U(0, 1)$, problems	
06/08/2024	**Gamma distribution:** Definition, mean, variance, mode.	Inductive
07/08/2024	Special case when $\theta = n = 1$. m.g.f., c.g.f., moments	
09/08/2024	cumulants, β_1, β_2, γ_1 and γ_2 coefficients	Deductive
10/08/2024	additive property and distribution of sum of i.i.d. exponential	Review lesson
12/08/2024	**Laplace Distribution:** mean, variance, Distribution function, quartiles	
13/08/2024	m.g.f. moments, β_1, β_2, γ_1 and γ_2 coefficients.	Problem Solving
14/08/2024	Laplace distribution as a distribution of the difference of two i.i.d. exponential variates. examples and problems	Drill-lesson
16/08/2024	**1.1 Multiple Linear Regression (for trivariate data only):** Concept of multiple linear regression.	Analytic
17/08/2024	Plane of regression, Yule's notation	**Teaching** Aids
19/08/2024	Fitting of regression plane by method of least squares	
20/08/2024	Correlation matrix, Partial regression coefficients and their interpretation.	Compute
21/08/2024	Residual: definition, order,	LCD
23/08/2024	Properties of residual	PPT
24/08/2024	Derivation of mean and variance	
26/08/2024	Covariance between residuals	Google Classroom
27/08/2024	Residual plot., Problems	
28/08/2024	**1.2 Multiple and Partial Correlation:** Concept of multiple correlations.	YouTube
30/08/2024	Definition of multiple correlation coefficient, derivation of formula for multiple correlation coefficient.	
31/08/2024	Properties of multiple correlation coefficient	

No. of periods / Lectures					Action Taken
Planed	Missed	Extra taken	Actual taken	Syllabus Remaining	
22	03	03	2-2	00 lecture	Completed as per plan