KRANTIGURU SHYAMJI KRUSHNA VERMA KACHCHH UNIVERSITY

FACULTY OF SOCIAL SCIENCE AND HUMANITIES (DOE)

Programme	Bachelor of Arts	Branch/Spec.	BA **Statistics**
Semester	II (Two)	Version/Pattern	NEP 2020
Effective from Academic Year	2023-24	Effective for the batch Admitted in	2024-25
Subject Code	DSCM - 201	Subject Name	**FUNDAMENTALS OF STATISTICS – II**

Teaching scheme						Examination scheme (Marks)			
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	4	-	-		4	Theory	50	50	100
Hours	4	-	-	-	4	Practical	-	-	-

Pre-requisites:

- The learners should have basic understanding of data and should have a logical thinking.

Learning Outcome:

- After successfully completing this course, the student will be able to perform the following tasks very easily.
  - Will be an enough understanding between sample and population.
  - Easily identify and select appropriate sampling methods.
  - Become familiar with the basic techniques of central tendency.
  - Able to analyse and interpret the results of various measures of central tendency.
  - Will able to use the various measures of central tendency.

Theory Syllabus

Unit	Content	Hours
1	**Sampling Methods** ➢ Meaning of Population and Sample. ➢ Population Inquiry and Sample Inquiry. ➢ Need of Sampling and Size of a Sample. ➢ Characteristics of a good Sample. ➢ Methods for Sampling.	**15**
2	**Measure of Central Tendency - 1** ➢ Meaning of Central Tendency. ➢ Characteristics of a Good Measure. ➢ Arithmetic Mean (Simple Mean). ➢ Combined, Weighted and Geometric Mean. ➢ Advantages and Disadvantages of Mean.	**15**
3	**Measure of Central Tendency - 2** ➢ Introduction to Measures of Positional Averages. ➢ Median, Quartiles and Deciles. ➢ Percentiles and Percentile Rank. ➢ Advantages and Disadvantages of Median.	**15**
4	**Measure of Central Tendency - 3** ➢ Introduction and Meaning of Mode. ➢ Empirical formula for finding Mode. ➢ Graphical Method for finding Mode. ➢ Advantages and Disadvantages of Mode. ➢ Comparative study of Mean, Median and Mode.	**15**

Reference (APA Style)

1 **Business Statistics** by J. K. Sharma, Pearson India Pvt Ltd, Chennai.
2 **Statistical Methods** by S. P. Gupta, Sultan Chand & Sons, New Delhi.
3 **Business Statistics** by S. C. Gupta, Himalaya Publishing House, Mumbai.
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Semester	II (Two)	Version/Pattern	NEP 2020
Effective from Academic Year	2023-24	Effective for the batch Admitted in	2024-25
Subject Code	DSCM - 202	Subject Name	**MATHEMATICAL STATISTICS – II**

Teaching scheme						Examination scheme (Marks)			
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	4	-	-		4	Theory	50	50	100
Hours	4	-	-	-	4	Practical	-	-	-

Pre-requisites:

- The learners should have basic knowledge of mathematics up to high school level.

Learning Outcome:

- The course outcomes of Mathematical Statistics aim to prepare students for rigorous data analysis, research and decision-making across various domains. After successful completion of the course, the students should be well equipped to apply statistical reasoning and methodologies to the real life problems and contributes to evidence based practices in their respective fields.

Theory Syllabus

Unit	Content	Hours
1	**Determinant** ➢ Meaning and Definition. ➢ Order 2 x 2 and 3 x 3. ➢ Properties (Rules). ➢ Minors and Co-factors. ➢ Cramer's Rule. ➢ Examples.	15
2	**Matrix** ➢ Meaning and Definition. ➢ Types of Matrices. ➢ Operations on Matrices. ➢ Adjoint and Inverse. ➢ Examples.	15
3	**Permutation** ➢ Meaning and Formula. ➢ Permutations of Different Things. ➢ Permutations of Similar Things. ➢ Circular Permutation. ➢ Examples.	15
4	**Combination** ➢ Meaning and Formula. ➢ Combination of things taken some or all at a time. ➢ Some Restricted Combinations. ➢ Examples.	15

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Semester	II (Two)	Version/Pattern	NEP 2020
Effective from Academic Year	2023-24	Effective for the batch Admitted in	2024-25
Subject Code	MI - 201	Subject Name	**FUNDAMENTALS OF STATISTICS – II**

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Semester	II (Two)	Version/Pattern	NEP 2020
Effective from Academic Year	2023-24	Effective for the batch Admitted in	2024-25
Subject Code	MD - 201	Subject Name	**MATHEMATICAL STATISTICS – II**

Teaching scheme						Examination scheme (Marks)			
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