

M. G. Science Institute, Ahmedabad

Autonomous | Affiliated to Gujarat University, Ahmedabad

(Managed by The Ahmedabad Education Society)

Department of Statistics

Bachelor of Science (Hons.) in Statistics

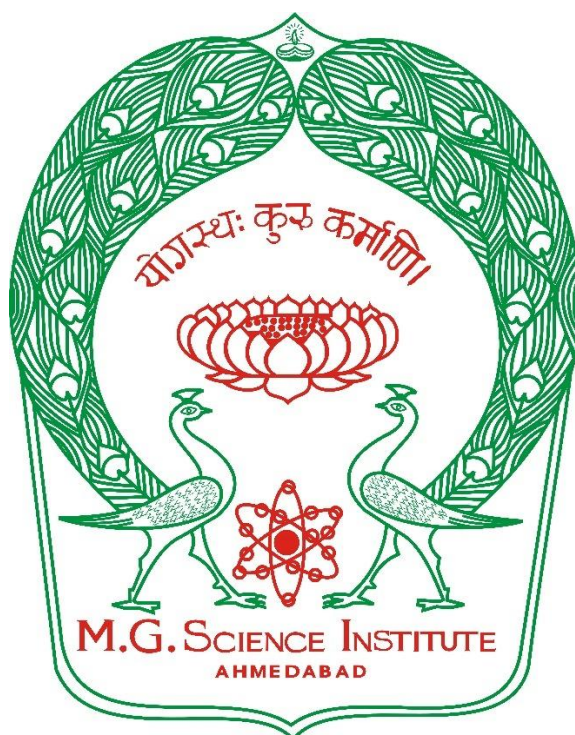
B.Sc. (Hons.) Statistics

4 Year, 8 Semester Full-Time Programme

Choice Based Credit System (CBCS) & Grading System

Outcome-Based Education Pattern

(Effective from Academic Year 2024-25)



Semester: III	Course Title: Basics of Jamovi	Credit: 2
Course No.: STSEC236		Hours: 3/week

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 1	REMEMBERING	Remember Jamovi's user interface, its layout, menus, and basic functions.
CO 2	UNDERSTANDING	Understand the statistical analysis workflow in Jamovi, including importing data, summarizing data, and selecting appropriate summary measures.
CO 3	APPLYING	Apply Jamovi to perform descriptive statistics and data visualization.
CO 4	ANALYSING	Analyze datasets in Jamovi to identify trends, relationships, and patterns using data visualization.
CO 5	EVALUATING	Evaluate the output generated by Jamovi and interpret statistical results.
CO 6	CREATING	Execute complete statistical workflow in Jamovi.

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	3				1
CO 2	3	1			1
CO 3	3	3	2	3	2
CO 4	3	3	3	3	2
CO 5	3	2	3	3	3
CO 6	3	3	3	3	3

Unit	Detailed Syllabus	No. of Hours of Teaching
I	<p>Introduction to Jamovi</p> <ul style="list-style-type: none"> Understanding the Navigation Bar and Features of Jamovi Navigating and Understanding User interface (UI) Types of Data, Measurements of Scale Preparing a data file in Jamovi and entering the data Importing data from CSV, EXCEL format. <p>Data Management and Data Wrangling in Jamovi</p> <ul style="list-style-type: none"> Compute the variable from the existing variable(s). Use of some functions to compute a new variable using functions like square root, logarithm, z score Transform existing variable to new variable Transform existing variable to new variable by recoding Filtering cases: filter rows, filter with multiple conditions, filter with conditions on multiple variables. <p>Descriptive data analysis</p> <ul style="list-style-type: none"> Measures of central tendency, Measures of Dispersion, Percentiles, Skewness & Kurtosis Exporting tables and plots Frequency distribution Normality test 	15

	<ul style="list-style-type: none"> • Categorical data analysis, Tabulation, Frequency tables, Contingency tables Presentation of Data <ul style="list-style-type: none"> • Simple, Multiple, stacked bar plot • Histogram, density plot, box-whisker plot, violin plot • Scatter diagram 	
II	Practicals Based on Unit I	30

Suggested References:

1. The jamovi project (2022). jamovi. (Version 2.3) [Computer Software]. Retrieved from <https://www.jamovi.org>.
2. Navarro DJ and Foxcroft DR (2022). learning statistics with jamovi: a tutorial for psychology students and other beginners. (Version 0.75). DOI: 10.24384/hgc3-7p1

