GANPAT UNIVERSITY

FACULTY OF MANAGEMENT STUDIES

Programme	Bachelor of Business Administration	Branch/Spec.	Logistics
Semester	I	Version	1.0.0.0
Effective from Academic Year	2026-27	Effective for the batch Admitted in	July 2026
Subject code	BLOG102	Subject Name	Fundamentals of Statistics

Teaching scheme						Examination scheme (Marks)			
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	04	00	00	00	04	Theory	50	50	100
Hours	04	00	00	00	04	Practical	00	00	00

Pre-requisite:

Students should be aware of basic Knowledge of Statistics

Objective:

To familiarize students with the basic statistical tools used and to summarize and analyze quantitative information for decision-making.

Learning Outcomes/Course Outcomes

Student will be able to

CO1	Familiar with the basic statistical tools: How to calculate and apply measures of central tendency and measures of dispersion grouped and ungrouped data cases.
CO2	Understand about Probability Theory and its application in real business situations.
CO3	Understand about Probability Distributions.
CO4	Understand Sampling distribution and Statistical Quality Control (SQC).

Theory syllabus

Unit	Content	Hrs
1	Measures of Central Tendency and Dispersion: Introduction to Statistics, Arithmetic Mean, Median and Mode, Quartiles - Properties, Merits & Demerits. Introduction, Range, Coefficient of range, Quartile deviation, Coefficient of quartile deviation, Mean deviation and coefficient of mean deviation, Variance and Standard Deviation for all types of frequency distribution, Coefficient of variation, Skewness, and Kurtosis.	15
2	Correlation Analysis: Methods of Studying Correlation for Grouped and Ungrouped Frequency Distribution. Regression Analysis: Equation of Regression Lines for Grouped and Ungrouped Frequency Distribution, Standard Error Estimate.	15
3	Analysis of Time Series - Components of a time series, Adjustment in time series, Measurement of trend by moving average and least squares methods (linear and quadratic trends), Measurement of seasonal variation by simple average method, Forecasting, De-seasonalisation.	15
4	Transportation and Assignment Problems: Nature and scope of transportation and allocation models, different methods for finding initial solution - N-W Corner Rule, Least Cost Method and VAM. Unbalanced TP, Test for optimality – MODI method, AP a variant of Transportation model, Hungarian method, Restricted Assignment problems	15

Exam: Theory 30%, Numerical 70 %

Text Books

Statistics for Management by Richard I Levin, David S. Rubin, Masood Husain Siddiqui, Sanjay Rastogi (Pearson)

Reference Books:

Essentials of Business Statistics Communicating with Numbers by Sanjay Jaggia, Alison Kelly (Tata McgraHill)
Statistics for Business and Economics by Richard Anderson, , Dennis Sweeney (Cengage)
Mathematical Statistics - Saxena and Kapoor.
Statistical Methods Gupta S P Sultan Chand &Sons, 2004.
Comprehensive Statistical Methods by P. N. Arora, Sumeet Arora & S. Arora
.Business Statistics by J. K. Sharma

Mapping of PO-CO and PSO-CO:

Course Outcome (CO) No.	PO-CO Mapping								PSO-CO Mapping					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6

	CO1	2	2	3	3	1	3	2	2	3	3	2	3	2	3
	CO2	1	3	2	2	2	2	1	2	2	3	3	2	2	3
	CO3	2	3	2	3	2	2	3	2	2	1	2	2	1	1
	CO4	3	3	2	2	3	1	1	1	3	2	2	3	2	3