SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus as per NEP 2020 with effect from the Academic Year 2024-2025

Bachelor of Commerce(B.Com.)
Semester - III

Course Code	UB03MDCOM01	Title of the Course	Business Mathematics & Statistics – III
Total Credits of the Course	04	Hours per Week	04

Course Objectives	1.This course aims to furnish the students with the Mathematical and Statistical requirement for business management and to know the function of Statistics in the Management field.
	2. To provide college students with reinforcement of Statistical computations.

	Course Content	
Unit	**Description**	**Weightage (%)**
1.	**Correlation:** (a) Introduction and meaning, interpretation and types of correlation. (b) Method to study Correlation: Scatter Diagram, Karl Pearson's Product Moment Methods, Spearman's Rankcorrelation. (C) Properties of Correlation and Example based on Probable Error.	25 %
2.	**Regression** (a) Introduction and meaning of Regression. (b) Regression Lines, Regression Coefficients, Regression Equations (c) Properties of Regression, examples based on regression line equations, regression co-efficient.	25 %
3.	**Index Numbers** (a) Introduction and Meaning and Importance of Index Numbers. (b)Construction of wholesale Price Index Number (c) Time Reversal Test and Factors Reversal Test (d) Cost of Living Index Number and related examples.	25 %
4.	**Time series Analysis** (a) Meaning, importance and components (b) Methods to study trend: Free hand curve, Movingaverage (3,4,5 yearly), Least square method (LinearTrend) (c) Seasonal indices by Simple average method.	25 %

Teaching-Learning Methodology	Lecture, Assignment, Quiz, Seminars, Mooc videos, Content- Focused Methods andInteractive / Participative Methods.

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Internal and / or External Examination Evaluation

Sr. No.	Details of the Evaluation / Exam Pattern	50 Marks (%)	25 Marks (%)
1	Class Test (at least one)	15 (30%)	10 (40%)
2	Quiz (at least one)	15 (30%)	05 (20%)
3	Active Learning	05 (10%)	----
4	Home Assignment	05 (10%)	05 (20%)
5	Class Assignment	05 (10%)	----
6	Attendance	05 (10%)	05 (20%)
	Total Internal (%)	**50 (100%)**	**25 (100%)**
	University Examination (%)	**50 (100%)**	**25 (100%)**

	Course Outcomes
1.	Understand how to process and interpret information to arrive at logical conclusions to common business mathematical and statistical applications.
2.	Apply the knowledge of mathematics and statistics in solving business problems.
3.	Analyze and demonstrate mathematical and statistical skills required in intensive areas in Economics and business

	Suggested References
Sr. No.	**References**
1	Sancheti&Kapoor: Statistic: Theory, Methods and Applications, Sultan Chand & Sons, NewDelhi.
2	Kapoor, V. K.: Business Mathematics, Sultan Chand and Sons, New Delhi.
3	Soni, R. S.: Business Mathematics, Pitamber Publishing House.
4	Trivedi and Trivedi: Business Mathematics, Pearson India Limited. New Delhi.

On-line resources to be used if available as reference material
On-line Resources https://www. investopedia.com/terms/correlation https :/ /www. in vestopedia.com/terms/timeseries https://www.youtube.com/watch?v=PJ68mfewmdI https://onlinecourses.swayam2.ac.in/cec24_mg20/preview

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