



Shrimathi Devkunvar Nanalal Bhatt Vaishnav College For Women (Autonomous)

Owned and Managed by Cork Industries Charities Trust
Affiliated to University of Madras - Re-Accredited with 'A+' Grade by NAAC - 4th Cycle

COURSE DATA SHEET

SEMESTER	I	BATCH	2026
COURSE NAME	BUSINESS STATISTICS	COURSE CODE	26UCOGE1D01
COURSE UNITS	5	COURSE TYPE	Generic Elective(GE) - I
CONTACT HOURS (L-T-P)	75	CREDITS	5
OFFERED BY	B.Com (Commerce)	SHIFT	8:20 – 12:50 pm

COURSE OBJECTIVES	
1	To understand the role of statistics in business decision-making.
2	To acquire knowledge of fundamental statistical techniques.
3	To develop analytical and problem-solving skills using statistical methods.
4	To apply statistical tools in analyzing trends and forecasting.
5	To enable interpretation and construction of index numbers for economic analysis.

COURSE OUTCOMES: On completion of the course the students will be able to...		
	CO Statement	Cognitive Level
CO1	Gain knowledge on Data Collection and to organize, manage and present data. Compare the datasets using appropriate diagrams and graphs.	K3
CO2	Analyze statistical data using measures of central tendency. Evaluate the deviations on an average by measures of dispersion.	K4
CO3	Gain knowledge on correlation coefficient between two variables and its properties. To derive regression lines and properties of regression coefficient.	K5
CO4	Adequate knowledge about time series	K3 & K4
CO5	Relate qualitative and quantitative variables and their associations in Index numbers	K4



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SYLLABUS

UNIT	TOPICS	HOURS
1	Business Statistics–Meaning&Definition, Collection, Classification and Tabulation of Statistical Data–Measures of Central Tendency- Mean, Median and Mode(Simple Problems)	15
2	Measures of Dispersion- Range, Quartile Deviation, Mean Deviation, Standard Deviation & Coefficient Of Variation- (Simple Problems)	15
3	Correlation- Meaning of Correlation- Simple Correlation- Scattered Diagram- Karl Pearson Coefficient of correlation – Spearman Rank Correlation - Simple Correlation only-	15
4	Time Series- Meaning and Components of Time Series- Measurement of Trend- Graphical Method- Semi Average Method, Moving Average Method- Measurement of Seasonal Indices- Simple Average Method- (Simple Problems)	15
5	Definition and Meaning of Index Numbers- Unweighted Index Numbers- Simple aggregate method- Simple average of Price relative method- Weighted aggregate Index number- Aggregative Indices- Laspeyre's Index Number- Paasche's Index Number- Bowley's Index Number- Fisher's Index Numbers.	15
Note(if any)		

TEXT/REFERENCE BOOKS/E - RESOURCES:

Text Books	- Gupta, S.P. Statistical Methods. Sultan Chand & Sons, New Delhi, 2023. - Vittal, P.R. Business Statistics. Margham Publications, Chennai, 2020. - Rajagopalan, S.P. and Sattanathan, R. Business Statistics and Operations Research. Vijay Nicole Imprint Pvt. Ltd., Chennai, 2025
Books For Reference	Vittal, P.R. Mathematical Statistics. Margham Publications, Chennai, 2020.



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	2. Saxena, H.C. Elementary Statistics. S. Chand & Company Ltd., New Delhi, 2016 3. Sampath, S. Sampling Theory and Methods. Narosa Publishing House, New Delhi, 2005.
	4. Malik, S.C. and Arora, Savita. Mathematical Analysis. New Age International Publishers, New Delhi, 2022. 5. Goon, A.M., Gupta, M.K., and Dasgupta, B. Fundamentals of Statistics (Volume One). The World Press Pvt. Ltd., Kolkata, 2008
E-Learning Resources	1. http://data36.com/statistical-average-mean-median-mode 2. http://www.mathsisfun.com/data/standard-deviation.html/ 3. http://www.randomservices.org/random 4. https://www.khanacademy.org/math/statistics-probability 5. https://www.coursera.org/learn/statistics

PEDAGOGY (TEACHING METHODOLOGY):

- Chalk and Talk
- Online Coaching
- LCD
- Assignment
- Seminar
- Quiz



CO-PO AND CO-PSO MAPPING:

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
CO1	3	2	2	2	1	-	3	2	3
CO2	3	2	2	2	1	-	3	2	3
CO3	3	3	3	3	2	-	3	2	3
CO4	3	3	3	3	2	-	3	2	3
CO5	3	3	3	3	2	-	3	2	3
Average (Use only filled in cells for calculation)	3	2.6	2.6	2.6	1.6	-	3	2	3

Correlation Level: Strong-3 Moderate-2 Weak-1 No Correlation-0



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JUSTIFICATION OF CO-PO/PSO MAPPING

CO	PO/PSO	Level of correlation	Justification
CO1	PO1	3	Students to confidently apply domain knowledge with clarity and assertiveness in data-driven decision-making.
	PO2	2	Utilize to develop life skills for logical appraisal and informed decision-making.
	PO3	2	Utilize advanced business statistics to design and develop innovative solutions for challenging societal problems.
	PO4	2	Develop a program-centric mindset facilitating advanced studies and specialization in the respective domain.
	PO5	1	To foster lifelong learning, adaptability, and clarity for field specialization in a dynamic environment.
	PO6	-	-
	PSO1	3	To grasp essential concepts, principles, and practices necessary for successfully undertaking business ventures.
	PSO2	2	To build a strong foundation for pursuing professional courses like CA, ICWA, and ACS.
	PSO3	2	To create a robust platform connecting academic knowledge with real-world business applications.
CO2	PO1	3	Students to apply domain knowledge confidently and assertively in data analysis and decision-making.
	PO2	2	Enhance life skills for logical appraisal and decision-making through deeper understanding.
	PO3	2	Students to design data-driven solutions for complex societal challenges.
	PO4	2	Foster a program-centric mindset to facilitating further studies and specialization in the domain.
	PO5	1	Incorporate to promote lifelong learning, adaptability, and preparedness for specialized fields in a dynamic environment.
	PO6	-	-
	PSO1	3	To grasp the foundational concepts, principles, and practices essential for successful business ventures.
	PSO2	2	To provide a foundational skill set essential for pursuing professional courses like CA, ICWA, and ACS.
	PSO3	3	To bridge academia and the business world, facilitating the application of statistical concepts in real-world scenarios.



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CO3	PO1	3	Students to confidently apply domain knowledge with clarity and assertiveness in data-driven decision-making.
	PO2	3	Enhance life skills for logical appraisal and decision-making through deeper understanding.
	PO3	3	Utilize correlation and regression analysis to design data-driven solutions for complex societal challenges.
	PO4	3	Foster a program-centric mindset that facilitates deeper understanding and advanced exploration within a specific domain, paving the way for further studies and specialization.
	PO5	2	To promote lifelong learning, adaptability, and readiness for specialized fields in a dynamic environment.
	PO6	2	Integrate ethical values into correlation and regression analysis to foster self-actualization and compassion in data-driven decision-making.
	PSO1	3	To comprehend the essential concepts, principles, and practices for successful business ventures.
	PSO2	2	To provide essential skills for pursuing professional courses like CA, ICWA, and ACS, enhancing data analysis capabilities.
	PSO3	3	To bridge academia and the business world, facilitating the application of statistical methods in real-world business scenarios.
CO4	PO1	3	Students to confidently apply domain knowledge with clarity and assertiveness in analyzing temporal data.
	PO2	3	Enhance life skills for logical appraisal and decision-making through deeper understanding.
	PO3	3	Incorporate time series analysis to develop data-driven solutions for societal challenges.
	PO4	3	Foster a program-centric mindset through time series analysis, facilitating further studies and specialization in the respective domain.
	PO5	2	To foster lifelong learning, adaptability, and readiness for specialized fields amidst a dynamic environment.
	PO6	-	-
	PSO1	3	Incorporate time series analysis to comprehend essential concepts, principles, and practices for successful business ventures.
	PSO2	2	Mastering time series analysis provides essential skills for pursuing professional courses like CA, ICWA, and ACS, enhancing data analysis capabilities.
	PSO3	3	To bridge academic theory with real-world business applications, facilitating practical understanding.



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CO5	PO1	3	cultivates clarity in concepts, confidence in domain knowledge application, and assertiveness in decision-making across diverse opportunities.
	PO2	3	Enhance life skills for logical appraisal and decision-making through deeper understanding.
	PO3	3	Incorporate operations research to develop effective solutions for complex societal challenges.
	PO4	3	Foster a program-centric thought process through comprehensive study, facilitating further specialization in the respective domain.
	PO5	2	Incorporate lifelong learning to adapt and specialize effectively in a dynamic environment.
	PO6	-	-
	PSO1	3	Incorporate operation research to grasp essential concepts, principles, and practices for successful business ventures.
	PSO2	2	To enhance analytical skills essential for pursuing professional courses like CA, ICWA, and ACS.
	PSO3	3	To bridge academia with practical business applications, fostering a seamless integration of theoretical knowledge and real-world practices.