

GANPAT UNIVERSITY									
FACULTY OF MANAGEMENT STUDIES									
Programme	MBA		Branch/Spec.		Agribusiness / Financial Services / International Business / Logistics and Supply Chain Management / Pharmaceuticals/Technology Management/Business Analytics				
Semester	I				Version	1.0.0.0			
Effective from Academic Year			2026-27		Effective for the batch Admitted in			July 2026	
Subject code		ICC505QSM		Subject Name		Quantitative Statistics for Managers			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	3	0	0		3	50	50	50	100
Hours	3	0	0		45	Practical			
Pre-requisites:									
Objective: The objective of this course is to teach various concepts of Basic Statistics and Quantitative methods of Analytics.									
Course Outcome:									
On the completion of the course, the student will learn									
Co-1: the basics of Statistics required for Business management									
Co-2: the statistical tools implied to analyse the data									
Co-3: various methods of forecasting based decision making techniques									
Co-4: the basic sample testing theories									
Theory syllabus									
Unit	Content								Hrs
1	Basic Statistical Methods: Measures of Central tendency: Mean, Median, Mode and Dispersion: Range, Inter Quartiles, Standard Deviation, Coefficient of Variation. Theory of Probability – Definition and Rules of Probability, Baye’s Theorem; Probability Distribution – Discrete distribution – (Binomial and Poisson), Continuous distribution – (Normal & Exponential). Decision Tree Analysis								12
2	Statistical Tools & Techniques: Co-Relation & Regression; Single Linear Regression; Multiple Regression: Use of Software in Multiple Regression, Building Multiple Regression Models, Different types of models, Multicollinearity								10
3	Forecasting Methods: Subjective Delphic, Nominal grouping and Jury of Opinion; Quantitative – Input-Output Model, Time Series Method, Moving Average, Exponential Smoothing, Linear Trend Line, Method of Least Square, Measuring error – MAD, MAPD, CE, MSE, MSPE.								11

Note: Version 1.0.0.0 (First Digit= New syllabus/Revision in Full Syllabus, Second Digit=Revision in Teaching Scheme, Third Digit=Revision in Exam Scheme, Forth Digit= Content Revision)

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4	Estimation Theory and Hypothesis Testing: Sampling theory; Formulation of Hypotheses; Application of Z-test, t-test, F-test and Chi-Square-test in testing of the hypothesis. Techniques of association of Attributes & Testing.	12
Practical content		
Reference Books		
1. 2. 3. 4. 5. 6. 7.	Quantitative Techniques in Management by Vohra, Tata McGraw-Hill, Latest edition. Statistics for Management by Richard I. Levin and David S. Rubin (Pearson Education). Statistics for Management, T N Srivastava and Shailaja Rego, TMH. Business Analytics by James Evans, Pearson Education. Turban, Sharda, Decision Support and Business Intelligence Systems, Delen, Pearson, 9th edition, 2014 Cathy O'Neil and Rachel Schutt. Doing Data Science, Straight Talk From The Frontline. O'Reilly. 2014. Business Analytics: The Science of Data Driven Decision Making By U Dinesh Kumar, Wiley Publication	

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