SUBJECT CODE	Category	SUBJECT NAME	TEACHING & EVALUATION SCHEME					Th	T	P	CREDITS
			THEORY			PRACTICAL					
			END SEM	MST	Q/A	END SEM	Q/A				
GUMA102	GE	Subsidiary Mathematics	60	20	20	0	0	3	1	0	4

Course Objective

This course aims at equipping student with a broad-based knowledge of mathematics with emphasis on business applications.

Course Outcomes

After the successful completion of this course students will be able to:

1. *understand and apply the basics ratio and percentage*
2. *understand the real-life applications of Mathematics.*
3. *analyse the profit and loss situations*
4. *illustrate the mathematical treatment of Stock and Shares*
5. *learn the basics of Matrix and Determinants.*

Course Content:

UNIT – I
Ratio, Proportion and Percentage: Ratio- Definition, Continued Ratio, Inverse Ratio, Proportion, Continued Proportion, Direct Proportion, Inverse Proportion, Variation, Inverse Variation, Joint Variation, Percentage - Meaning and Computations of Percentages.

UNIT – II
Profit and Loss: Terms and Formulae, Trade discount, Cash discount, Problems involving cost price, Selling Price, Trade discount and Cash Discount. Introduction to Commission and brokerage, Problems on Commission and brokerage, concepts and treatment of depreciation.

SUBJECT CODE	Category	SUBJECT NAME	TEACHING & EVALUATION SCHEME					Th	T	P	CREDITS
			THEORY			PRACTICAL					
			END SEM	MST	Q/A	END SEM	Q/A				
GUMA102	GE	Subsidiary Mathematics	60	20	20	0	0	3	1	0	4

UNIT – III Interest

Simple Interest, Compound interest (reducing balance & Flat Interest rate of interest), Equated Monthly Instalments (EMI), Principles of Hire-Purchase.

UNIT – IV
Shares and Dividends
Concept & Examples of Shares, Stock exchange, Face Value, Market Value, Dividend, Equity Shares, Preferential Shares, Bonus Shares, delete examples.

UNIT – V
Matrices and Determinants
Multivariable data, Definition of a Matrix, Types of Matrices, Algebra of Matrices, Determinants, Adjoint of a Matrix, Inverse of a Matrix via adjoint Matrix.

Reference Books:

1. Business Mathematics by Dr. Amarnath Dikshit & Dr. J. K. Jain.
2. Business Mathematics by V. K. Kapoor - Sultan Chand & Sons, Delhi.
3. Business Mathematics by Bari - New Literature Publishing Company, Mumbai.

Chairperson
Board of Studies
Shri Vaishnav Vidyapeeth
Vishwavidyalaya, Indore

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Faculty of Studies
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Vishwavidyalaya, Indore

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Vishwavidyalaya, Indore

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Shri Vaishnav Vidyapeeth
Vishwavidyalaya, Indore