B.COM. SEMESTER – 5				
3	Core	Business Mathematics and Statistics - 1		
Name of the Course: Course credit:		Business Mathematics and Statistics - 1 03		

45 (Hours)

100

Total marks: **Objectives**:

Teaching Hours:

To familiarize the students with various statistics & mathematical tools and their application in the business decision making.

Unit	Content	No. of Lectures
1	LINEAR CORRELATION:	12
	- Definition of variables	
	- Meaning and Definition of Correlation	
	- Types of Correlation	
	- Properties of Correlation coefficient	
	- Method of Correlation:	
	 Scatter Diagram 	
	Karl Pearson's method	
	Spearman's Rank method	
	- Probable Error of Coefficient of Correlation	
	 Co-efficient of Correlation from bivariate Frequency distribution 	
	- Examples	
2	LINEAR REGRESSION:	13
	 Meaning and Definition of Regression 	
	- Definition of Regression coefficient	
	 Properties of Regression coefficients & Relation between Correlation and Regression coefficient 	
	- Two lines of Regression	
	 Regression Co-efficient from bivariate frequency distribution 	
	- Examples	
3	PROBABILITY:	10
	 Concept of Probability 	
	- Mathematical & Statistical Definition of probability	
	 Definition of Different Terms (Random Experiment, Sample Space, Types of Eventsetc) 	
	- Addition Theorem, Condition Law, Multiplication	
	Evamples	
	- Examples	

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4	PROBABILITY DISTRIBUTION-1:	10
	 Concept of Discrete Random Variable & Continuous variable and Its Probability Distribution 	
	 Mathematical Expectation of Discrete Random Variable. 	
	- Mean & Variance of Discrete probability distribution	
	 Properties and Application of Binomial without proof Examples 	
	45	

SUGGESTED READINGS AND REFERENCE BOOKS:

- 1. Statistics By D.S. sancheti and V.K. Kapoor
- 2. Fundamentals of mathematical statistics By V.K. Kapoor and S.C. Gupta
- 3. Basic Statistics By B.L. Agarwal
- 4. Fundamentals of Statistics By S.C. Srivastva and Sangya Srivastava

Note: Latest edition of the reference books should be used.

