Ambrish Gupta, 4/e, Pearson Education.

- Introduction to Financial Statement Analysis, Ashish K Bhattacharya, Elsevier India.
- Financial Accounting – Raman B. S,Vol I & Vol II, 1/e, United Publishers, 2009.

CO-PO MAPPING

CO	PO				
	PO1	PO2	PO3	PO4	PO5
CO1	X				
CO2	X				
CO3		X			
CO4		X			
CO5				X	X

BUSINESS STATISTICS & ANALYTICS

Semester	**I**	**CIE Marks**	**: 40**
Course Code	**18MBA14**	**SEE Marks**	**: 60**
Teaching Hours / week (L:T:P)	**4-0-0**	**Exam Hours**	**: 03**
	Credits : 04		

Course Objectives:

1. To make the students learn about the applications of statistical tools and techniques in decision making.
2. To emphasize the need for statistics and decision models in solving business problems.
3. To enhance the knowledge on descriptive and inferential statistics.
4. To familiarize the students with analytical package MS Excel.
5. To develop analytical skills in students in order to comprehend and practice data analysis at different levels.

Unit 1:

Introduction to Statistics: Meaning and Definition, functions, scope and limitations, Collection and presentation of data, frequency distribution, measures of central tendency - Mean, Median, Mode, Geometric mean, Harmonic mean.

Measures of dispersion: Range – Quartile Deviation – Mean Deviation - Standard Deviation – Variance-Coefficient of Variance - Comparison of various measures of Dispersion.

Unit 2:

Correlation and Regression: Scatter Diagram, Karl Pearson correlation, Spearman's Rank correlation(one way table only), simple and multiple regression(problems on simple regression only).

Unit 3:

Probability Distribution: Concept and definition - Rules of probability – Random variables – Concept of probability distribution – Theoretical probability distributions: Binomial, Poisson, Normal and Exponential – Baye's theorem (No derivation) (Problems only on Binomial, Poisson and Normal).

Unit 4:

Time Series Analysis: Introduction - Objectives Of Studying Time Series Analysis - Variations In Time Series - Methods Of Estimating Trend: Freehand Method - Moving Average Method - Semi-Average Method -

Least Square Method. Methods of Estimating Seasonal Index: Method Of Simple Averages - Ratio To Trend Method - Ratio To Moving Average Method.

Unit 5:

Linear Programming: structure, advantages, disadvantages, formulation of LPP, solution using Graphical method. Transportation problem: basic feasible solution using NWCM, LCM, and VAM unbalanced, restricted and maximization problems.

Unit 6:

Project Management: Introduction – Basic difference between PERT & CPM – Network components and precedence relationships – Critical path analysis – Project scheduling – Project time-cost trade off – Resource allocation, Concept of project crashing.

PRACTICAL COMPONENT :(Student-Centered Learning)

- Students are expected to have a basic excel classes.
- Students should be able to relate the concepts which can highly enhance an application scenario in your profession.
- Student should demonstrate the application of the techniques covered in this course.

COURSE OUTCOMES:

1. Facilitate objective solutions in business decision making under subjective conditions.
2. Demonstrate different statistical techniques in business/real-life situations.
3. Understand the importance of probability in decision making.
4. Understand the need and application of analytics.
5. Understand and apply various data analysis functions for business problems.

RECOMMENDED BOOKS:

- Business Statistics and Analytics – Pannerselvam, Nagesh, Senthilkumar, Cengage Learning, 2018.
- BStat: A South Asian Perspective with Course Mate – Keller & Arora Cengage Learning, 2016.
- Quantitative Methods for Business, Anderson, Sweeney and Williams, Thomson, 2005 ISBN 981-240-641-7.

REFERENCE BOOKS:

- Statistical Method s – Dr S. P Gupta, Sulthan Chand & sons, fourth Edition, ISBN 81-8054298-X.
- Fundamentals of Statistics, S.C Gupta, 6th edition, Himalaya Publishing House, 2007, ISBN, 978-81-8318-755-8.
- Analyzing Multivariate Data, James Lattin, Douglas Carroll and Paul Green, Thomson Learning, 2003, ISBN 0-534-34974-9.

CO-PO MAPPING

CO	PO				
	PO1	PO2	PO3	PO4	PO5
CO1	X			X	X
CO2		X	X	X	
CO3			X	X	X
CO4				X	
CO5		X			