

BBA I Year	BBA-C103		Semester-I		
	Statistics for Business Decisions				
Time Allotted for End Semester Examination	Marks Allotted for Internal Assessment	Marks Allotted for End Semester Examination (ESE)	Maximum Marks (MM)	Total Credits	Maximum Hours
3 Hrs.	30 (20+10)	70	100	06	60

OBJECTIVE: To familiarize the students with various Statistical Data Analysis tools that can be used for effective decision making. Emphasis will be on the application of the concepts learnt.

- Measures of Central Value: Characteristics of an ideal measure; Measures of Central Tendency -mean, median, mode, harmonic mean and geometric mean. Merits, Limitations and Suitability of averages. Relationship between averages **(12 hours)**
- Measures of Dispersion: Meaning and Significance. Absolute and Relative measures of dispersion - Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation, Moments, Skewness, Kurtosis. **(12 hours)**
- Correlation Analysis: Meaning and significance. Correlation and Causation, Types of correlation. Methods of studying simple correlation - Scatter diagram, Karl Pearson's coefficient of correlation, Spearman's Rank correlation coefficient, Regression Analysis: Meaning and significance, Linear Regression, Regression lines (X on Y, Y on X). **(12 hours)**
- Analysis of Time Series: Meaning and significance. Utility, Components of time series, Models (Additive and Multiplicative), Measurement of trend: Method of least squares, Parabolic trend and logarithmic trend **(12 Hours)**
- Probability: Meaning and need. Theorems of addition and multiplication. Conditional probability. Bayes' theorem, Random Variable- discrete and continuous. Probability Distribution: Meaning, characteristics (Expectation and variance) of Binomial, Poisson, and Normal distribution. Central limit theorem. **(12 Hours)**

SUGGESTED READINGS:

1. Anderson, D.R., Sweeney, D.J., Williams, T.A., Camm, J.D., Cochran, J.J., Fry, M.J., & Ohlmann, J.W., (2013). Quantitative Methods for Business. Cengage Learning, New Delhi.
2. Beri, G.C. (2005). Business Statistics. Tata McGraw Hill, New Delhi.
3. Brandimarte, P., (2012). Quantitative Methods: An Introduction for Business Management. John Wiley & Sons, USA.
4. Curwin, J., & Slater, R., (2008). Quantitative Methods for Business Decisions. Thomson Learning, London.
5. Dewhurst, F. (2006). Quantitative Methods for Business and Management. McGraw Hill, New Delhi.
6. Curwin, J., & Slater, R., (2004). Quantitative Methods: A Short Course. Thomson Learning, London.
7. Keller, G. (2009) Introduction to Statistics. Cengage Learning, New Delhi
8. Levine, D.M, Kribbeil, T. C, Berenson, M and Vishawanath, P.K. (2011). Basic Statistics: A First Course. Pearson Education. New Delhi.
9. Levin R.I. and Rubin, D.S. (2011). Statistics for Management; 8th ed. Pearson Education. New Delhi.
10. Levine, Stephan, Kribbeil and Borenjon, (2007). Statistics for Managers using Microsoft Excel. PHI, New Delhi.
11. Levin, R.I., & Rubin, D.S., (2009). Statistics for Management. Pearson Education Inc, New Delhi.
12. Sharma, J.K. (2007). Business Statistics. Pearson Education. New Delhi.
13. Sharma, J.K., (2009). Quantitative Techniques for Managerial Decisions. Macmillan Publishers India Ltd, New Delhi.

NOTE: The list of cases, specific references and books including recent articles will be announced in the class by concerned teachers from time to time.