## **BUS 1.2 QUANTITATIVE METHODS**

Lectures	:	5 periods/week	Sessional Marks	•••	20
University Exam	:	3 hours	University Examination Marks	:	80

- UNIT-I: **Progressions, Limits, Differentiation and Integration:** Progressions, A.P.,G.P., Limits, Differentiation, Maxima and Minima of one variable and simple applications (without trigonometry back ground), Integration and simple applications (without trigonometry back ground).
- UNIT-II: <u>Binomial Theorem and Probability</u>: Binomial theorem, Permutations, Combinations, Concept of Probability, Addition and Multiplication theorems of Probability, Baye's theorem and its applications.
- UNIT-III: *Theoretical Distributions:* Binomial, Poisson and Normal distributions and their simple applications.
- UNIT-IV: <u>Testing of hypothesis</u>: Z-test, t-test and Chi-square test.
- UNIT-V: <u>Correlation, Regression and Time series:</u> Simple correlation, Rank correlation and simple regression, Time series, Components of time series, Measurement of Trend (straight line by method of least squares).

## Suggested Books:

- 1. K.V.Sivaih & K.Satya Rao, Business Mathematics, S.Chand & Company, New Delhi.
- 2. Vohra N.D., *Quantitative Techniques in Mangement*, Tata McGraw Hill, New Delhi.
- 3. Misra, Quantitative Techniques for Management, Excel Books, New Delhi.
- 4. D.C.Sancheti and V.K.Kapoor, *Business Mathematics*, Sultan Chand, New Delhi.
- 5. S.C.Gupta, Business Statistics, Himalaya Publishing House, Bombay.
- 6. K.Chandra Sekhar, Business of Statistics.
- 7. K.V.Sarma, Statistics Made Simple, Prentice Hall of India.
- 8. Sharma, *Quantitative techniques for Managerial Decisions*, McMillan India Ltd., Chennai, 2006.
- 9. Levin, Krehbiel and Berenson, *Business Statistics: A first Course*, Pearson Education Asia.
- 10. Nagar, Das, *Basic Statistics*, Oxford University Press.