

QUANTITATIVE METHODS

COURSE NO. CP: 102

Max. Marks (Ext. Exam): 80

Min. Pass Marks : 32

OBJECTIVES :

The objective of the course is to make the students familiar with some basic statistical and linear programming techniques. The main focus, however, is in their applications in business decision making.

COURSE CONTENTS :

- Unit – I Statistical basis of managerial decision: Frequency distribution and graphic representation of frequency distribution, Measures of Central Tendency – Mean, Median, Mode, Requisite of ideal measures of Central techniques, Merits, Domestic of Mean, Median Mode and their managerial application.**
- Unit – II Dispersion Measures of dispersion range, Q.D., M.D., S.D., coefficient of variation, skew ness, kurtosis.
- Unit – III Theory of Probability and probability distribution – Mathematical probability, Trail and event, sample space, Simple problem based on sample space, Binomial, Poisson, Normal distribution and their application in business decision making.
- Unit – IV Correlation and regression analysis – Karl Pearson’s coefficient of correlation, rank correlation, repeated ranks, spears man’s rank correlation, regression equation, Regression coefficient, Time Series analysis and forecasting.
- Unit – V Sampling and Sample Tests – Purposive sampling, Random Sampling, Null – hypothesis, Alternative hypothesis, Chi-square test of goodness of fit and t – test for difference of Means and Application of these test in management.**

SCHEME OF EXAMINATION:

Total Marks : (Internal 20, External 80) = 100 marks

PATTERN FOR EXTERNAL EVALUATION:

Sec. A: (Short Answers) 4 out of 8 4 x 8 = 32 Marks.

Sec. B: (Essay type & case) 3 out of 5 3 x 16 = 48 Marks.

SUGGESTED READINGS:

- 1. Gupta, S.P. and Gupta M.P. ‘Business Statistics’. New Delhi, Sultan Chand, 1997.**
- 2. Levin Richard I and Rubin David S. ‘Statistics for Management’. New Jersey, Prentice Hall Inc., 1995.**
3. Kapoor, ‘Operation Research’.
4. Elhance, ‘Fundamental of statistics for Management’.