

VEER NARMAD SOUTH GUJARATA UNIVERSITY, SURAT

S.Y.B.COM (HONOURS) SEMESTER -III

BUSINESS STATISTICS PAPER - III

(IN FORCE FROM JUNE 2012-2013)

Objective: It enables the students to gain understanding of statistical techniques as are applicable to business.

**I. Introduction :** **20%**

Statistics as a subject; Definition, scope and Distrust collection of data  
Diagrammatic and Graphic presentation of Data.

**II. Analysis of Univariate data:** **25%**

Construction of a frequency distribution; concept of central tendency and dispersion-and their measures; partition values; moments; skewness and measures; kurtosis and measures.

**III. Analysis of time Series:** **30%**

Causes of variations in time series data; Components of a time series; Decomposition- Additive and multiplicative models; Determination of trend-Moving averages method and method of least squares ( including liner, second degree, parabolic, and exponential trend); computation of seasonal indices by simple averages, moving average method, ratio-to-moving average .

**IV. Theory of probability:** **25%**

Probability as a concept; the three approaches to defining probability; addition and multiplication laws of probability; conditional probability Bayes' THEOREM; Expectation and variance of a random variable.

Suggested Readings:

1. Hooda, R.P. Statistics for business and economics; Macmillan. New Delhi.
2. Ya Lun Chou; Statistical analysis with business and economics application, Holt; Rinehart & Winster. New York.
3. Lewin andRrubin; Statistics for management; prentice-hall of india, new delhi.
4. Hole & Jessen; Basic Statistics for business and economics; John Wiley and Sons, New York.

**VEER NARMAD SOUTH GUJARATA UNI-VERSITY, SURAT**  
**S.Y.B.COM (HONOURS) SEMESTER -IV**  
**BUSINESS STATISTICS PAPER - IV**  
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**Objective:** It enables the students to gain understanding of statistical techniques as are applicable to business.

**I. Analysis of Bivariate data: 25%**

Linear regression and correlation.

**II. Index Numbers : 25%**

Meaning, types and uses of Index numbers; Method of constructing price and quantity indices (simple and aggregate ); tests of adequacy; Chain-base index number; Base shifting, splicing, and deflating; problems in constructing index numbers; Consumer price index. Fisher's index number, Time and Factor reversal tests, Wholesale Price index number, Cost of living index number.

**III. Forecasting Methods : 25%**

Forecasting – concept, types and importance; General approach to forecasting; method of forecasting; Forecasting demand; Industry Vs Company sales forecasts; factors affecting company sales.

**IV. Probability Distributions : 25%**

Probability Distributions as a concept; Binomial, Poisson and Normal Distributions – their properties and parameters; Empirical Distributions – generating; Applications to business.

**Suggested Readings:**

1. Hooda, R.P. Statistics for business and economics; Macmillan. New Delhi.
2. Ya Lun Chou; Statistical analysis with business and economics application, Holt; Rinehart & Winster. New York.
3. Lewin and Rrubin; Statistics for management; prentice-hall of india, new delhi.
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