# SARDAR PATEL UNIVERSITY
## B. Com. Semester - III
### UB03DCOM66 Advanced Statistics – VI

**Effect from June, 2020**

**1. Input - Output Analysis : [25%]**
Meaning of Input - output analysis, assumption and limitations, Leontief's static open model - importance and application of the model, Simple examples up to the matrix of order 3×3.

**2. Distribution of Income and Economic Models : [25%]**
Concept of Income Distribution models, Study of Paroto's income distributionanalysis and interpretations. Lorentz curve of concentration, Fitting of Pareto and
Lorentz curves - numerical examples only. Classical models- structural equations and structural parameters of model, Linear homogeneous equation system, study of (i) price determination model and (ii) income determination model.

**3. Time Series : [25%]**
Meaning and uses of time series, Various components of time series, determination of trend by using graphical, moving average and least square method, To separate seasonal component by using sale forecasts and seasonal variation by using moving average method, link relative method, with examples.

**4. Association of Attributes** (25%)

Concept of Qualitative data Meaning of Association of attributes, Meaning and interpretation of 2 x 2 contingency table, Types of Association of attributes, method of studying association namely (i) Comparison method of observed and expected frequency (ii) Proportion method (iii) Coefficient of Association by Yule's method. (with its interpretation ) examples based on 2 x 2 contingency table only

**Reference Books :**
**1.** J. K. Sharma, Mathematics for Business and Economics, Asian Books Private Ltd
**2.** S. C. Gupta, V. K. Kapoor, Fundamentals of Applied Statistics, Sultan Chand & Sons, New Delhi.
**3.** David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, Statistics For Business and Economics, South - Western Cengage Learning India Pvt. Ltd. New Delhi.
**4.** S.C. Gupta: "Fundamentals of Mathematical Statistics" S. Chand, New Delhi.
**5.** Levin and Rubin: "Statistics for Management", Prentice Hall of India Pvt. Ltd. New Delhi.