Anekant Education Society's

Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati

Autonomous

Course Structure for S.Y. B.Com. **BUSINESS STATISTICS (2022 Pattern)**

Name of the Programme: S.Y. B.Com.

Program Code: UCBS

Class: S.Y. B.Com.

Semester: III

Paper Code	Title of Paper	No. of Credits
UCBS236(D)	Business Statistics-III	3

SYLLABUS (CBCS) FOR S. Y. B. Com. BUSINESS STATISTICS

(w. e. from June, 2023)

Name of the Programme **:** B.Com

Program Code **:** UCBS

Class **:** S.Y.B.Com.

Semester **:** III

Course Name **:** Business Statistics – III

Course Code **:** UCBS236(D)

No. of Lectures **:** 48

No. of Credits **:** 3

Course Outcomes:

The students will acquire knowledge about the

1. the multiple and partial correlations for trivariate data and interpret it
2. fit multiple regression model to the trivariate data to investigate relation between three variables
3. applications of demography and life table in the field of insurance, government etc.
4. analyze the data for the real life situations from business.
5. analyze data pertaining to attributes and to interpret the results

TOPICS/CONTENTS:

Unit – 1 Theory of Attributes (up to order three only):

Introduction: Classification, Notations, dichotomy, Manifold classification, types of classes, Order of a class, dot operator to find relation between class frequency (up to order three, Fundamental set of class frequencies, Consistency up to three attributes, Independence and Association of two attributes, Yule's coefficient of association, example and problems. **(16)**

Unit – 2 Multiple Regression, Multiple and Partial Correlation:

Introduction: Multiple Regression, Statement of equation of plane of regression of X_1 on X_2 and X_3.Standard Error of Estimate, Partial and Multiple Correlation, Advantages and limitations of multiple correlation analysis. example and problems **(14)**

Unit – 3 Vital Statistics :

Introduction: Methods of collecting vital Statistics, applications of vital statistics, Mortality rates : Crude Death Rate (CDR), Age Specific Death Rate (ASDR), standardized Death Rate (STDR) (direct method), Fertility rates: Crude Birth Rate (CBR), Age Specific Fertility Rate (ASFR), Total Fertility Rate (TFR), Gross Fertility Rate (GFR), Population Growth rate: Gross Reproductive Rate (GRR) and Net Reproductive Rate (NRR), example and problems. **(10)**

Unit – 4 Life Table:

Introduction: Construction of life table, applications of life tables, functions (l_x, d_x, p_x, q_x, L_x, T_x, e_x^0) and their interpretation, Expectation of life, example and problems. **(08)**

List of Practicals for Business Statistics for Sem-III

Practical No.	Name of Practical
1	**Fitting of Multiple Regression using Excel**
2	**Vital Statistics using Excel**
3	**Life Table using Excel**

Recommended Books :

1. S.P. Gupta - Statistical Methods
2. S.C. Gupta - Fundamentals of Statistics
3. J.S Chandran - Statistics for Business and Economic
4. S.C. Gupta and V. K. Kapoor - Fundamentals of Applied Statistics