

**SARDAR PATEL UNIVERSITY**

**B.COM SEMESTER: VI**

**Paper code: UB06DCOM86**

**Title of Paper: Advanced Statistics –XII**

**. TOTAL CREDIT: 3 Syllabus will effect from: June, 2023**

**Objectives: (1) To enhance analytical ability in students for processing data.**

**(2) To familiarize students with applications of Statistical technique in business decision Making.**

<b>UNIT</b>	<b>DESCRIPTION IN DETAIL</b>	<b>WEIGHTAGE</b>
1	<b>Market Research:</b> Definition of Market Research, scope, problem and formulation, cost value and round off use of EMV and EVPS approach. Research design data collection. Strategies, univariate and bi-variate analytical tools and quantitative methods applied to Marketing problems. Bayesian approach to problems of market research.	<b>25%</b>
2	<b>Design Of Experiment:</b> Principles of randomization replication and local control, Completely randomized Design, Randomized block Design and Latin Square Design and their ANOVA table. Simple Applications.	<b>25%</b>
3	<b>Sampling Techniques:</b> Meaning of Sample and population. Characteristics of an ideal sample. Systematic Sampling, Cluster sampling and two stage sampling methods and estimation of population mean and standard error without proof. Non-sampling error.	<b>25%</b>
4	<b>Demography:</b> Meaning and Scopes of demography, history and growth of demography, measures of population growth, common measures of growth rate, growth curves, logarithmic, exponential, Gompertz and logistic curves. Life tables scope, Importance and limitations of life tables, Different methods of construction of life tables, abridged life tables, numerical examples to illustrate these methods.	<b>25%</b>

**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 Mathematica Statistics" S. Chand, New Delhi.
5. R. G. D. Allen, Mathematical Analysis for Economists, Macmillan, New, York.
6. World Population Dynamics Barban A. Anderson
7. The life Table Wunsch, Guillium.