

Name : Dr. K.L. Grover  
Designation : Associate Professor  
Department : Commerce

**LESSON PLAN (Odd Sem.)**

SESSION : 2023-24

**CLASS – B.com<sup>3rd</sup> Sem.**

**Subject : BC 3.2: BUSINESS STATISTICS**

**Week 1: Introduction:** Statistics-Definitions, Functions, Scope and Limitations of Statistics

**Week 2: Measures of Central Tendency:** Types of averages – Arithmetic Mean (Simple and Weighted), Median and Mode.

**Week 3: Measures of Dispersion:** Range, Quartile Deviation, Mean Deviation, Standard Deviation and Coefficient of Variation.

**Week 4: Skewness:** Meaning, Measurement using Karl Pearson and Bowley's measures

**Week 5: Simple Correlation and Regression Analysis: Correlation Analysis:** Meaning of Correlation: simple, multiple and partial; linear and non-linear, Correlation and Causation, Scatter diagram

**Week 6: Simple Correlation and Regression Analysis:** Pearson's co-efficient of correlation; calculation and properties, Correlation and Probable error; Rank and Concurrent Correlation.

**Week 7: Simple Correlation and Regression Analysis: Regression Analysis:** Principle of least squares and regression lines, Regression equations and estimation; Properties of regression coefficients

**Week 8 : Simple Correlation and Regression Analysis:** Relationship between Correlation and Regression coefficients; Standard Error of Estimate and its use in interpreting the results

**Week 9 : Index Numbers:** Meaning and uses of index numbers; Construction of index numbers: fixed and chain base: univariate and composite. Aggregative and average of relatives – simple and weighted

**Week 10 : Index Numbers:** Tests of adequacy of index numbers, Base shifting, splicing and deflating. Problems in the construction of index numbers; Construction of consumer price indices

**Week 11 : Time Series Analysis:** Components, Estimation of Trends (Graphical method, Semi Average Method, Moving Averages method and Method of Least Squares for linear path).

**Week 12 : Probability:** Approaches to the calculation of probability; Calculation of event probabilities,

**Week 13 : Probability:** Addition and multiplication laws of probability (Proof not required); Conditional probability

**Week 14 : Probability:** Baye's Theorem (Proof not required)

**Week 15 :** Revision

**Week 16 :** Revision

Subject : BC-5.1: FINANCIAL MANAGEMENT

**Week 1: Financial Management:** Nature, significance, scope and objectives of financial management, functions of finance executive in an organization, functional areas of financial management, changing role of financial management in India

**Week 2 : Financial planning and forecasting:** Its need & importance, drafting a financial plan; capitalization, over- capitalization and under-capitalization;

**Week 3 : Financial planning and forecasting:** financial forecasting; meaning, benefits and techniques of financial forecasting

**Week 4 :Investment Decisions:** The Capital Budgeting Process, Cash flow Estimation, Payback Period Method, Accounting Rate of Return, Net Present Value (NPV),

**Week 5 : Investment Decisions:** Net Terminal Value, Internal Rate of Return (IRR), Profitability Index, Capital budgeting under Risk – Certainty Equivalent Approach and Risk- Adjusted Discount Rate

**Week 6:Financing Decisions:** Sources of finance- short-term, medium term and long term, Cost of Capital- Estimation of components of cost of capital, Methods for Calculating cost of equity capital

**Week 7:Financing Decisions:** Cost of Retained Earnings, Cost of Debt and Cost of Preference Capital, Weighted Average cost of capital (WACC) and Marginal cost of capital.

**Week 8 :Capital structure:** Theories of Capital Structure (Net Income, Net Operating Income, MM Hypothesis, Traditional Approach).

**Week 9 : Capital structure:** Operating and financial leverage; Determinants of capital structure

**Week 10 : Dividend Decisions:** Theories for Relevance and irrelevance of dividend decision for corporate valuation

**Week 11:Dividend Decisions:** MM approach of dividend and Cash and stock dividends; Dividend policies in practice

**Week 12 : Working Capital Decisions:** Concepts of working capital, the risk-return trade off, sources of short-term finance,

**Week 13 :Working Capital Decisions:** working capital estimation, cash management, receivables management,

**Week 14 :Working Capital Decisions:** inventory management and payables management

**Week 15 :** Revision

**Week 16 :** Revision



Subject : MCOM/GEN/1/CC5: Business Statistics

Week 1: Univariate analysis: central tendency, dispersion (theoretical concept);

Week 2 :Probability: Introduction, addition theorem, multiplication theorem, conditional probability, Bayes Theorem

Week 3: Theoretical probability distributions: Binomial, Poisson, Normal Distribution; their characteristics and applications.

Week 4:Sampling: probability and non probability sampling methods

Week 5: Sampling distribution and its characteristics; Hypothesis testing: hypothesis formulation, and testing

Week 6 : Statistical Tests: z-test, t- test, F-test, Analysis of variance,

Week 7 : Statistical Tests: Chi-square test, Wilcoxon Signed-Rank test, Kruskal-Wallis test.

Week 8 :Correlation analysis: simple, partial and multiple correlations

Week 9 :Regression analysis: simple linear regression model, ordinary least square method.

Week 10 : Time series analysis: components of a time series and their measurements and uses.

Week 11 :Index numbers: meaning and types, methods for measuring indices

Week 12 : adequacy of indices; Statistical quality control

Week 13 : causes of variation in quality, Control Charts, Acceptance sampling.

Week 14 : Revision

Week 15 : Revision

Week 16 : Revision

Week 17: Revision