

**Lesson Plan for the session 2022-23**

**Paper : Business Mathematics**

**Class : B.Com. Semester 1st**

**Teacher name: Saroj Bala**

**September 22**

Logarithms, Anti-logarithms Sequences and Series: Arithmetic & Geometric Progressions.  
Differentiation: Idea of simple derivative of different functions (excluding Trigonometrical functions); Rules of differentiation (simple standard forms).

**October**

Maxima and Minima of functions of one variable (including 2nd or 3rd order derivatives) relating to cost, revenue and profit.

Matrices and Determinants: concept of matrix, types, and algebra of matrices; properties of determinants; calculation of values of determinants up to third order, adjoint of a matrix, elementary row or column operations;

**November**

Finding inverse of a matrix through adjoint and elementary row or column operations; solution of a system of linear equations having unique solution and involving not more than three variables.

**December**

Compound Interest and Annuities: different types of interest rates, concept of present value and amount of a sum; types of annuities; present value and amount of an annuity (including the case of continuous compounding); valuation of simple loans and debentures; problems relating to sinking funds.

Revision and Class Tests

**Lesson Plan for the session 2022-23**

**Paper: Business Mathematics**

**Class: B.Com Semester 2<sup>nd</sup>**

**Teacher name: Saroj Bala**

**February 23**

Permutations and Combinations Binomial Theorem Linear inequalities: graphical solution of linear equalities in two variables, solution of system of linear inequalities in two variables.

**March**

Linear programming-formulation of equation: graphical method of solution; problems relating to two variables including the case of mixed constraints; cases having no solution, multiple solutions, unbounded solution and redundant constraints.

**April**

Data representation and interpretation: introduction, classification and tabulation of data, Diagrammatic and graphic representation of data: significance of diagrams and graphs,

**May**

Types of diagrams: bar diagram, pie chart, pictographs, graphs of time series or line graphs; graphs of frequency distribution: histogram, frequency polygon, ogives or cumulative frequency curves, limitations of diagrams and graphs.  
Revision and Class Tests.