

Tentative Lesson Plan for BA/BSCT  
Paper : Ordinary Differential Equations

April :- Geometrical meaning of a differential equation.

Exact differential equations, Integrating factor  
First order higher degree equations solvable  
for  $x, y, p$ . Lagrange's Equations. Clairaut's  
equations. Equations reducible to Clairaut's  
form. Singular solutions

May :- Orthogonal trajectories in Cartesian coordinates  
and polar coordinates. Self orthogonal family of  
curves. Linear Differential Equations with constant  
coefficients. Homogeneous linear Ordinary differential  
equations Equations reducible to homogeneous.

June :- Linear Differential equations of second order.  
Reduction to Normal form. Transformation of the  
equation by changing the dependent variable.  
Solutions by operators of non-homogeneous L.D.E.  
Reduction of order of a D.E. Method of Variations  
of parameters. Method of Undetermined coefficients

Ordinary Simultaneous D.E. Total D.E. General  
method of solving  $Pdx + Qdy + Rdz = 0$

Session (2021-22)  
Business Mathematics

Tentative Lesson Plan for BCom II<sup>nd</sup> Semester

April 1 Linear Inequalities in two Variables  
Linear Programming.

May 1 Data - Introduction, Classification and  
Tabulation.

Diagrammatic Representation of Data.

June 1 - Graphical Representation of Data  
Data Interpretation.

July 1 - Permutations and Combinations  
Binomial Theorem.

Mukesh Rohilla

Session (2021-22)

Mathematical Foundations

Tentative Lesson Plan for BCA - II<sup>nd</sup> Semester.

April - Matrices. Rank of Matrix.

May 1 - Application of Matrices to solution  
of system of linear Equations.

June - Logical statements and Truth Tables  
Principle of Mathematical Induction.

July 1 - Groups  
rings, fields and Ideals.

Nutan Bokilka