SNUCEE 2027 MATHEMATICS SYLLABUS

Commerce & Economics

Sets –sets-operations on sets, relations C functions

Basic Algebra – Quadratic functions, polynomial functions, roots of equation and linear Inequalities.

Matrices s determinants, solution of a system of equations –Operations on matrices, Adjoint and Inverse of a matrix, properties of determinants, solution of a linear system of equations

Algebra-Ratio, proportion-Simple interest, compound interest- Arithmetic, geometric and harmonic progression- Permutation and Combination, Binomial Theorem C Mathematical Induction.

Analytical Geometry – Area, surface area and volume of solids, Straight Lines, Circles, and conics.

Trigonometry – Trigonometric ratios and relationship – identities -heights and distances

Probability and Statistics – Probability – addition theorem -multiplication theorem-conditional Probability – total probability – Baye's theorem – Random variable – Bernoulli Distribution and Binomial Distribution-Data representation, Measures of Central Tendency, Measures of Dispersion.

Differential Calculus – Limits and Continuity, Differential techniques, Maxima and Minima, simple applications

Integral Calculus – Evaluation- substitution, partial fractions, integration by parts, Definite integrals as a limit of a sum. Properties of definite integrals- Applications of integrals in finding area.

Differential equations – order, degree - Solution of homogenous equation of first order and first degree, method of separation of variables.

Linear Programming – Formulation of linear programming problem

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