Module I: ***Numerical expressions and Equations:*** Simultaneous linear equations (up to three variables), Quadratic equations in one variable-factorization and quadratic formula

(10 Hours)

Module II ***Matrices:*** introduction **-** type of matrices – - trace and transpose and determinants - matrix operations –ad joint and inverse –rank- solving equations by matrices: Cramer's Rule(not more than Three variables).

(15 Hours)

Module III **Sequence, Series and Progression :**Concepts and differences - Arithmetic progression- n th term and sum of n terms of an AP- Insertion of Arithmetic means in AP - Geometric progression- 'n'th term and sum of n terms of an GP - Insertion of Geometric Mean in GP -Harmonic progression.

20 Hours)

Module IV Interest and Time value :*Concept* of interest-Types of interest: Simple interest and compound interest – nominal, real and effective rate of interest. Future value and Present Value; Annuity and Perpetuity . Computing future and present values of annuity (regular and immediate) - multi and growing period perpetuity. Compound annual growth rate- computation of Equated Monthly Installments(EMI).

(15 Hours)

Module V: Descriptive Statistics: Measures of Central Tendency – Mean : Arithmetic mean , Geometric mean and Harmonic Mean- Median ,Mode and other position values. Measures of Dispersion: mean deviation, quartile deviation, standard deviation and coefficient of variation. Measures of Skewness andKurtosis.

(20 Hours)