

## Remedial Mathematics:

### 1. Algebra :

Equations reducible to quadratics, simultaneous equations (linear and quadratic), Determinants, properties of solution of simultaneous equations.

by Cramer's rule, matrices, definition of special kinds of matrices, arithmetic operations on matrices, inverse of a matrix, solution of simultaneous equations by matrices, pharmaceutical applications of determinants and matrices.

Evaluation of  $E_{n1}$ ,  $E_{n2}$  and  $E_{n3}$ , mensuration and its pharmaceutical applications.

### 2. Measures of central value :

Objectives and pre-requisites of an ideal, measure, mean, mode and median.

### 3. Trigonometry :

Measurement of angle, T-ratios, addition, subtraction and transformation formula, T-ratios of multiple, submultiple, allied and certain angles, Application of logarithms in pharmaceutical computations.



#### 4. Analytical Plane Geometry:

Certain co-ordinates, distance between two points, area of triangle, a locus of point, straight line, slope and intercept form, double-intercept form, normal (perpendicular form), slope-point and two-point form, general equation of first degree.

#### 5. Calculus:

##### Differential:

Limits and functions, definition of differential coefficient, differentiation of standard functions, including function of a function (chain rule).

Differentiation of implicit functions, logarithmic differentiation, parametric differentiation, successive differentiation.

##### Integral:

Integration as inverse of differentiation, indefinite integrals of standard forms, integration by parts, substitution and partial fractions, formal evaluation of definite integrals.