

GUJARAT TECHNOLOGICAL UNIVERSITY

Pharm.D.

1st year

Subject Name: Remedial Mathematics

Subject Code: 818807

Teaching Scheme (Hours)				Evaluation Scheme (Marks)				Total marks
Theory	Tutorial	Practical	Total	Theory		Practical		
				External	Internal	External	Internal	
3	1	0	4	70	30	0	0	100

Sr. No.	Course Contents	Hours	Module Weightage
1	Algebra : Determinants, Matrices	10	11%
2	Trigonometry : Sides and angles of a triangle, solution of triangles	12	13.5%
3	Analytical Geometry : Points, Straight line, circle, parabola	12	13.5%
4	Differential calculus: Limit of a function, Differential calculus, Differentiation of a sum, Product, Quotient Composite, Parametric, exponential, trigonometric and Logarithmic function. Successive differentiation, Leibnitz's theorem, Partial differentiation, Euler's theorem on homogeneous functions of two variables	18	20%
5	Integral Calculus: Definite integrals, integration by substitution and by parts, Properties of definite integrals.	12	13.5%
6	Differential equations: Definition, order, degree, variable separable, homogeneous, Linear, heterogeneous, linear, differential equation with constant coefficient, simultaneous linear equation of second order.	16	17.5%
7	Laplace transform: Definition, Laplace transform of elementary functions, Properties of linearity and shifting.	10	11%

Course Materials:

Text books

- Differential calculus By Shantinakaran
- Text book of Mathematics for second year pre-university by Prof.B.M.Sreenivas

Reference books

- Integral calculus By Shanthinakaran
- Engineering mathematics By B.S.Grewal
- Trigonometry Part-I By S.L.Loney