

SARDAR PATEL UNIVERSITY
Programme: B.Sc
Semester: II
Syllabus with effect from: November-2011

Paper Code: US02EMTH02	Total Credit: 2
Title of Paper: Mathematics	

Unit	Description in detail	Weightage (%)
I	Limit: Defination and examples(without 2 and \pm), Limit of Polynomial functions, rational functions, trigonometric functions. Differentiation: Defination and examples, working rule of derivative, chain rule, derivative of inverse function, implicit function, parametric function, exponential function and logarithmic function .	25%
II	Integration: Defination and examples, method of substitution for integration (trigonometric substitution), Integration by parts.	25%
III	Definite Integration, Fundamental principle of definite integration.	25%
IV	Differential equations: Defination, Order and degree of differential equation, Solution of differential equation, differential equation of 1st order & 1st degree, variable separable method.	25%

Basic Text & Reference Books:

- Maths - 1 and Maths - 2 Of Std. 12, Gujarat State Board, 2008 .
- College Algebra, 2nd Edition, By Spiegel M.R., Moyer R.E., Tata Mcgraw hill Publishing Co. Ltd.
- Analytic Calculus, Fuller and Parker.
- Integral Calculus, By Shanti Narayana, S.Chand Publishing co.
- Differential Calculus, By Shanti Narayana, S.Chand Publishing co.

