SARDAR PATEL UNIVERSITY
Programme & Subject: B.Sc (Mathematics)
Semester: IV
Syllabus with Effect from: November/December-2012

Paper Code: US04CMTH01	Total Credit: 3
Title Of Paper: Linear Algebra	

Unit	Description in detail	Weighting (%)
I	Vector spaces : Definition and examples ; Properties of vector spaces Subspaces Definition and Examples .	
II	Span of a set : Examples and Properties ; Union and intersection of subspaces of a vector space ; Linear dependence and independence vectors : Definition and Examples .	
III	Properties of LD and LI vectors ; Collinear and coplanar vectors: Definition and Examples .	
IV	Dimension and basis of a vector space : Definition , Examples and Applications .	
V	Linear Transformations : Definition and examples ; Property of Linear Transformation .	
VI	Matrix associated with a linear map ; Linear map associated with a Matrix ; Examples .	

Recommended Text:

V.Krishnamurthy , An introduction to Linear Algebra : Chapter 3 (3.1,3.2,3.3,3.5,3.6), Chapter 4 (4.1), Chapter 5 (5.1,5.2)

Basic Text & Reference Books:-

- P.B.Bhattachary,S.K.Jain,N.R.Nagpaul,First Course in Linear Algebra,Wiley - Eastan Ltd.
- Dr.Gundadhar Paria , Linear Algebra,New Central Book Agency .
- A Ramchandra Rao ,P.Bhima shankaram , Linear Algebra , Tata MacGraw-Hill Pub.