## **SARDAR PATEL UNIVERSITY**

## Programme & Subject: B.Sc (Mathematics) Semester: VI

Syllabus with Effect from: November/December-2013

Paper Code: US06CMTH06	T-4-1 C 3'4- 2
Title Of Paper: Mechanics - II	Total Credit: 3

Unit	Description in detail	Weighting (%)
I	Methods of plane dynamics, motion of a particle, motion of a system of	
	particles.	
II	Applications in plane dynamics projectile with and without resistance, Motion	
	under central force, planetary orbits.	
III	Kinetic energy of rigid body, angular momentum of rigid body, moment of	
	inertia of a rigid body.	
IV	Rotational motion about a fixed line, impulsive motion, general theory of	
	plane, collision.	

## **Recommended texts:**

> J.L.Synge and B.A.Griffith, Principles of Mechanics.

## **Basic Text & Reference Books:-**

> P.N.Chaterjee, Statics and Dynamics.

