

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

Paper Code: US04EMTH03	Total Credit: 2
Title Of Paper: Financial Mathematics - II	

Unit	Description in detail	Weighting (%)
I	The Arbitrage Theorem Risk neutral probability ; Multi period Binomial model ; Examples .	
II	Proof of the Arbitrage Theorem ; Weak Arbitrage strategy ; Examples.	
III	The Black-Scholes Formula ; its explanation ; Properties of Black-Scholes option cost ; Examples .	
IV	The Delta Hedging Arbitrage Strategy ; Derivations related with The Black-Scholes Formula ; Examples .	

Basic Text & Reference Books:-

- Sheldon M. Ross, An Elementary Introduction to Mathematical Finance(Second Edition).
- John C. Hull, Options , Futures and other derivatives(Seventh Edition).

