SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc – Information Technology (Integrated)
Semester: VI
Syllabus with Effect from: June - 2014

Paper Code: PS06EIIT02	Total Credit: 3
Title of Paper: Introduction to Simulation	

Unit	Description in Detail	Weightage (%)
I	**Introduction to simulation** Introduction Continuous and discrete system System simulation When to use simulation Phase of simulation study Advantages of simulation Limitations of Simulation Technique Areas of application	25%
II	**System Models** Concept of a system System Environment System Modeling Types of Models Static Physical Model Dynamic Physical Model Static Mathematical Model Dynamic Mathematical Model Principles Used in Modeling	25%
III	**System Study** Subsystems A Corporate model Environments Segment Production Segment Management Segment The Full Corporate Model System Analysis System Design System Postulation	25%
IV	**System Simulation** The Technique of Simulation Monte Carlo Method Types of system Simulation NCT for continues Model NCT for discrete Model	25%

	Distributed Lag Models	
	Cobweb Models	
	Progress of system simulation	

Basic Text & Reference Books:

- ➢ D.s.hira..system simulation by s.Chand and company Ltd
- ➢ Geoffrey Gordon.System simulation 2nd Edition by PHI