SARDAR PATEL UNIVERSITY
Programme & Subject: B.Sc (Computer Science)
Semester: V
Syllabus with Effect from: June-2013

Paper Code: US05CCSC05	**Total Credit: 3**
Title Of Paper: System Analysis & Design	

Unit	Description in detail	Weighting (%)
I	**The Concepts of System, Systems Analysis and Systems Development Life Cycle (SDLC)** The concept of a system The elements and characteristics of a system Types of systems Meaning of systems analysis Role of a systems analyst SDLC - Introduction Stages of systems analysis : Problem identification, Feasibility study and cost benefit analysis, System requirement analysis Stages of systems design : System design specification and programming, System implementation, follow up, maintenance, Evaluation of a system	25%
II	**Structured Systems Analysis and Design Method** Structured Systems Analysis and Design (SSADM) – need and meaning SSADM Methodology : System survey, Structured analysis, Structured Design, Hardware study, System Implementation, Maintenance Advantage s of SSADM. System design control.	25%
III	**Input/Output Design & Fact Gathering Techniques** Input : Data capture objectives, Data verification and validation Output : Design principles of output, Output objectives Fact finding techniques : Interviewing, Questionnaires, Record inspection, Observation	25%
IV	**Data Flow Diagrams and (CASE) Tools** Data Flow Diagrams (DFDs) – meaning and significance Symbols used in DFDs, constructing a DFD with illustration Physical and logical DFDs Use of system flowcharts CASE : an introduction CASE components : Diagramming Tools, Information repository, Interface generator, Code generator, Management tools Benefits of CASE, limitations of CASE	25%

Basic Text & Reference Books:-

- S. Parthasarthy & B. W. Khalkar : System Analysis & Design, 1st Edition, Master Ed. Cons., Nashik .
- James A. Senn : Analysis & Design of Information System 2nd Edition, McGraw-Hill Int.