

SARDAR PATEL UNIVERSITY
Programme: BCA
Semester: II
Syllabus with effect from: November/December-2011

Paper Code: US002cbca02	Total Credit: 3
Title Of Paper: Systems Analysis and Design	

Unit	Description in detail	Weighting (%)
I	The Concepts of System & System 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 Systems Development Life Cycle (SDLC) – An 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 Advantages 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 , Illustration case study Physical and logical DFDs Use of system flowcharts Computer Assisted System Engineering (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.

