Paper Code: PS02CIIT23	Total Credit: 4
Title Of Paper: Systems Analysis and Design	

Unit	Description in Detail	Weightage (%)
1	**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 - 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%
2	**Structured Systems Analysis and Design Method and Input/output Design** - 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 - Input : Data capture objectives, Data verification and validation - Output : Design principles of output, Output objectives	25%
3	**Data Flow Diagrams & Fact Gathering Techniques** - Fact finding techniques : Interviewing, Questionnaires, Record inspection, Observation - Data Flow Diagrams (DFDs) – meaning and significance - Symbols used in DFDs, constructing a DFD with illustration - Physical and logical DFDs - Use of system flowcharts - Introduction to Decision Table and Decision Tree - Structured English	25%
4	**Computer Assisted System Engineering (CASE) Tools and Quality Assurance** - CASE : an introduction - CASE components : Diagramming Tools, Information repository, Interface generator, Code generator, Management tools - Benefits of CASE, limitations of CASE - Levels of Assurance - Testing strategies	25%

MAIN REFERENCE BOOKS :

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