

Subject Code : 1CS4010204	Subject Title: SYSTEM ANALYSIS AND DESIGN
Pre-requisite :	-

Course Objective:

The course is intended to make students aware of various terminology used for system development life cycle. This course aims to develop skills in students for different analysis and design techniques. Students are expected to design system using various designing tools.

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture	Tutorial	Practical	Credit	Theory		Practical		Total
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
4	-	-	4	70	30	-	-	100

Subject Contents			
Sr. No	Topics	Total Hours	Weight (%)
1	Introduction of System: System definition, Element and General Model of System, System Concept, Characteristics of System, Types of system ,Types of user System development strategies (SDLC). DFD: Symbols of DFD, Rules for to Draw a DFD, Physical and Logical DFD, Data Dictionary, System Prototype Method	9	20
2	Role of system analyst, System investigation, Fact Finding Techniques ,Tools for Documenting Procedures & Decision : Decision Tree, Decision Table ,Structured English	9	20
3	Code design: Principle of Code Design, Types of code Form design : Principle of form ,Types of form Output design : principle of output, types of output ,output media Input design : Data capture, data validation: validation check, transaction check, steps of data capture Computer Aided system tools: types of Case tools, Advantage and disadvantages of case	9	20
4	System Engineering and Quality Assurance : Design of software , Software design and documentation tools:-Structure Flowchart , HIPO Chart, Warnier /Orr Diagrams Testing Documentation Managing System Implementation :- Training , Conversion	9	20
5	Case Studies : - Financial Accounting System - Payroll System - Library System - Inventory / Stock System -Billing System -(Input, Output, DFD)	9	20

Course outcomes:

At the end of this course, the students would be able:

- To understand the role of systems analysis within various systems development
- To develop an awareness of the different approaches to systems analysis
- To understand the systems analyst's activities, and apply current tools and techniques
- To discuss various systems analysis approaches and explain their strengths and weaknesses
- To provide suitable systems documentation for an analysis
- To finalize the Project Definition, Analysis and Designing for the final project.

List of References:

1. System Analysis & Design, 5th Edition, - S.Parthasarthy & B.W.Khalkar, Master Academy Publication
2. Analysis & Design of Information Systems - James A. Senn Mc Graw Hill
3. System Analysis & Design, 2nd Edition, Elias M awad, Galgotia Publication
4. Introduction to System Analysis & Design, 3rd Edition, I.T Hawryszkiewicz