

KSKV Kachchh University
Program: PGDCA
Semester: I

Paper Code: CECS102	Total Credit : 4 Total Marks : 70 Time : 3 Hrs
Title of Paper: System Analysis and Design	

Unit	Description	Weighting
I	INTRODUCTION TO SYSTEM ANALYSES AND DESIGN Business Process Modeling, Information System Components, Types of Business Information Systems, Organizational Structure, System Development Techniques and Tools, Overview of Systems development Methodologies, The System Development Life Cycle, Information Technology Department, The System Analyst Position. PRELIMINARY INVESTIGATION The importance of strategic planning, A framework for system development, Information System Projects, Evaluation of system requests, Preliminary investigation overview, Steps in preliminary investigation	20%
II	REQUIREMENTS MODELING System analysis phase overview, System development methods, Modeling tools and techniques, system requirements checklist, Scalability and total cost of ownership, Fact finding, Interviews, Other fact finding techniques, Documentation, Preview of data, Process and object modeling DATA AND PROCESS MODELING Data flow diagrams, Data dictionary, Process Description tools, Logical vs. physical models OBJECT MODELING Object oriented terms and concepts, Relationships among objects and classes, Object modeling with the unified modeling language	20%
III	TRANSITION TO SYSTEM DESIGN Evaluating software alternatives, Steps in evaluating and purchasing software packages, Completion of system analysis, Transition to system design, Prototyping, Overview of system design, Designing and using codes User interface design, Input design, Output design issues, Printed output	20%
IV	Data design concepts, Data design terminology, Data relationships, Normalization, Steps in database design, Database models, Data storage, Data control	20%
V	APPLICATION ARCHITECTURE Design checklist, Planning the architecture, Client/server architecture, Impact of the internet, Processing methods, Network models, Modeling application architecture, System management and support, system design completion APPLICATION DEVELOPMENT Quality assurance, Overview of application development, Structured application development, Other application development tools, Coding, Object-oriented application development, Testing the application, Documentation, Management approval	20%

Basic Text & Reference Books :-	
1.	System Analyses And Design, 4th Edition, By Shelly/Cashman/Rosenblatt (Thomson)
2.	System Analyses and Design, 3rd Edition, By Elias Awad (Galgotia Publications)
3.	

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Unit	Description	Total Marks
I	Q.1(A) Short / Medium Questions (With Internal Option)	06
	Q.1(B) Short / Medium Questions (With Internal Option)	08
II	Q.2(A) Short / Medium Questions (With Internal Option)	06
	Q.2(B) Short / Medium Questions (With Internal Option)	08
III	Q.3(A) Short / Medium Questions (With Internal Option)	06
	Q.3(B) Short / Medium Questions (With Internal Option)	08
IV	Q.4(A) Short / Medium Questions (With Internal Option)	06
	Q.4(B) Short / Medium Questions (With Internal Option)	08
V	Q.5(A) Short / Medium Questions (With Internal Option)	06
	Q.5(B) Short / Medium Questions (With Internal Option)	08