CLUSTER UNIVERSITY SRINAGAR
(SYLLABUS)

Course Code	BCA-DSE5103
Course Title	*System Analysis and Design*
Semester	*BCA 5th Semester*
Course Type & Credits	*Discipline Specific Elective* *04 Credits (L) + 02 Credits (T) = 06 Credits*

Unit I

Basic Concept of Systems The System: Definition and Concepts; Elements of a System: Input, Output Processor, Control, Feedback, Environment, Boundaries and Interface; Characteristics of a System; Types of systems -Physical and Abstract System, Open and Closed Systems, Man-made Systems; Information and its categories

Information System and System Analyst Information systems : TPS, OAS, MIS, DSS, ESS; System Analyst: Role and need of system analyst, System Analyst as an agent of change.

Unit II

System Development Life Cycle Introduction to SDLC, Various phases: study, analysis, design, development, testing, implementation, maintenance; System documentation: Types of documentation and their importance.

System Planning and Information Gathering Initial Investigations, Identification of user needs, Project Identification and Selection;

Unit III

Feasibility Study Definition, Importance of feasibility study, Types of feasibility study, System selection plan and proposal, Prototyping, Cost-Benefit Analysis: Tools and Techniques.

Tools for System Analysis Data Flow Diagram (DFD), Logical and Physical DFDs, Developing DFD; System Flowcharts and Structured charts, Structured English, Decision trees and Decision tables.

Unit IV

Input and Output Input design: Input data, Input media and devices; Output design; Form Design: Classification of forms, Requirements of Form design.

System Implementation and Maintenance Need of System Testing, Types of System Testing, Quality Assurance; System Conversion, Conversion methods, procedures and controls, System evaluation and performance, Maintenance activities and issues,

Suggested Readings:

1. Elias m. Awad: System Analysis and Design
2. Perry Edwards: System Analysis & design Mc Graw Hill

L = Lecture, P = Practical, T = Tutorial