2PGDCA3 - SYSTEM ANALYSIS AND DESIGN

UNIT-I

The System Concept, Characteristics, Elements and Types of a system. The System Development Life Cycle, Considerations for candidate systems, Prototyping. The Role of System Analyst

UNIT-II

System planning and Initial Investigation Information Gathering, information gathering tools. Structured Analysis, The Tools of Structured Analysis (DFD, Data Dictionary, Decision tree and Pseduo Codes, Decision Tables), pros and cons of each tool. System performance definition, description of outputs, Feasibility Study Cost/Benefit Analysis : Data Analysis, Cost/Benefit Analysis, The system proposal.

UNIT-III

The Process and Stages of System Design : Design methodologies, development activities. Input design, output design, forms design, types of forms, basics of form design, layout considerations and forms control.

UNIT-IV

File structure, file organization, objectives of database, data structure. System Testing and Quality Assurance, Why system testing, what do we test for, the test plan quality assurance, trends in testing, role of data processing auditor. Training and Documentation.

UNIT-V

Implementing and software maintenance, Conversion, combating resistance to change, post implementation review, software maintenance.

Hardware/Software Selection and the Computer Contract, suppliers, procedure for hardware/software selection, financial considerations in selection, the computer contract.

System Security, Disaster Recovery Planning