

MAJOR BASED ELECTIVE –I - SYSTEM ANALYSIS AND DESIGN

UNIT I

Business Problem & Computers : Overview of Business Organization – Information needs & systems – Some typical problems – System life cycle – System study – Feasibility Study

UNIT II

System Analysis – Initiation of Analysis – The Process of Analysis – System Design – Design factors – Design Constraints – Processing Techniques – The Process of design – Output Design – input Design – Process Design – File Data Base Design

UNIT III

Analysis & Design Tools – Data Flow Diagram – Data Dictionary – Entity Relationship Diagram – Decision Tree – Decision Table – Structured English – Structure Charts – Grid Charts – Layout Charts – Configuration Selection & Acquisition – Detailing the configuration – Storage requirements – Internal Memory – Processors – Terminals – Printers

UNIT IV

File Organization & Design : Functional Classification of Files – File Structure – File Organization – Inverted File – Security & Controls – Risk management – Physical Security – Access Control – Data Control – Other Security & control measures

UNIT V

Post – Design phases – Develop Software – Installation & Changes-over-System Operation & maintenance – Systems Applications – Financial Accounting – Inventory Accounting System – Equipment Maintenance – Bank Operations – Production Planning & control – Process Control – Robotics

TEXT BOOK:

System Analysis & Business Applications – Rajesh Nalk & Swapna Kishore, Wheeler Publishing – 1st edition 1994

REFERENCE BOOK:

Introducing Systems Analysis & Design – Ellas M. Awad – Galgotia Publications (P) Ltd., (Second Edition)