

**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar**  
**B. B. A. Information Technology Management Program**  
**Semester – IV**  
**UM04ABBI21 System Analysis and Design**  
**(w.e.f. November 2019)**

**Total Credits: 3**

**Total Marks: 100**

**THEORY: 3 Hrs per week**

**Unit - 1 Introduction to SAD**

**25%**

System and Characteristics of System, System Elements and System Concepts, Types of Systems and Integrated system, What is System Analysis?, Systems Analyst-Knowledge and Qualities and Objective, Role of Systems Analyst, Systems Approach and Systems Analysis

**Unit - 2 System Development Life Cycle**

**25%**

Introduction to Various Methodologies of Systems Development, What is SDLC? Problem Identification, Feasibility Study, System Requirement Analysis, System Design and Implementation, Evaluation of System, Difference between System Analysis and System Design

**Unit - 3 SSADM, Design Methodologies and DFD**

**25%**

Need of SSADM and Introduction to SSADM, System Survey and Structured Analysis, Structured Design and Hardware Study, System Implementation and Maintenance, Advantages of SSADM, DFDs and Symbols used, Rules for drawing DFDs, Constructing DFD, Physical and Logical DFDs

**Unit - 4 System Prototype and Fact-Gathering**

**25%**

System Prototype (Method, Process, Feature), Fact Gathering Techniques (Interviews, Questionnaires, Record Inspection and Observation)

**Evaluation:** Internal: 40 Marks

External: 60 Marks (Two – Hours Examination)

**References Books:**

1. **Prof. S. ParthaSarathy, Prof. B. W. Khalkar**, "System Analysis, Design And Introduction to Software Engineering (SADSE)", 9<sup>th</sup> Ed.
2. **James A. Senn**: "Analysis & Design of Information System", 2<sup>nd</sup> Ed., McGraw-Hill Int.