

**S. Y. B. C. A.  
BCA -203 System Analysis and Design**

Teaching Scheme (per week)		Examination Scheme					
Th. (hours)	Pr. (hours)	Internal		External		Total	
		Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
3	-	30	-	70	-	100	-

**UNIT-I (17 Marks)**

- System definition
- Need for system development
- Types of system
- Types of user
- System development strategies
  - o SDLC
  - o Structured Analysis Development Strategy
    - Physical and Logical DFD
    - Data Dictionary
  - o System Prototype Method
- Role of system analyst
- System investigation:- Fact Finding Techniques
- Tools for Documenting Procedures & Decision
  - o Decision Tree,
  - o Decision Table
  - o Structured English

**UNIT-II (18 Marks)**

- Code design
- Form design
- Input design
- Output design
- Computer Aided system tools

**UNIT-III (17 Marks)**

- System Engineering and Quality Assurance
  - o Design of software
  - o Software design and documentation tools
    - Structure Flowchart
    - HIPO
    - Warnier /Orr Diagrams
  - o Testing
  - o Documentation
- Managing System Implementation
  - o Training
  - o Conversion

**UNIT-IV (18 Marks)**

- Case Studies
  - o Financial Accounting System
  - o Payroll System

- o Library System
  - o Inventory / Stock System
  - o Billing System
- ( Input, Output, DFD)

**Books:**

- Analysis & Design of Information Systems - James A. Senn
- System Analysis & Design, 1st Edition, - S.Parthasarthy & B.W.Khalkar
- Introduction To S.A.D. – LEE VOL. 1 & 2

**Question Paper Scheme:**

**University Examination Duration : 3 Hours.**

- Q.1 - Unit-I (17 Marks)
- A. Objective/ Short Questions.
  - B. Descriptive/ Long questions.
- Q.2 - Unit-II (18 Marks)
- A. Objective/ Short Questions.
  - B. Descriptive/ Long questions
- Q.3 - Unit-III (17 Marks)
- A. Objective/ Short Questions.
  - B. Descriptive/ Long questions
- Q.4 - Unit-IV (18 Marks)
- Case study
- OR
- Q.4 - Unit-I to III (18 Marks)
- A. Objective/ Short Questions.
  - B. Descriptive/ Long questions ]

Note: 1. Options should be given in Q-1 to Q-3.