# Syllabus

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## Contents

# 1 System Analysis and Design

## 1.1 Jyoti Verma

### 1.1.1 System concepts & Information system environment:

- ☐ System Concepts
- ☐ Definition
- ☐ Characteristics of a system
- ☐ Elements of Systems
- ☐ Introduction to systems analysis and design
- ☐ System analysis
- ☐ System Design
- ☐ System Development Life Cycle

### 1.1.2 System Planning And Investigation

- ☐ Where does the system analyst come form?
- ☐ What does he do?
- ☐ Preparating for case as a system analyst
- ☐ Technical Skills
- ☐ Communication Skills
- ☐ Role of System Analyst
- ☐ Change agent
- ☐ Investigation and monitor
- ☐ Phychologist
- ☐ Sales person
- ☐ Motivator
- ☐ Politician plan of the system analyst
- ☐ Position in the MIS organisation

### 1.1.3 File organisation

### 1.1.4 System Testing

☐ System testing conversion

☐ Combating resistance to change

☐ past implementation

☐ Review

☐ Software maintenance

☐ Hardware/Software selection

☐ Security disaster / Recovery

☐ Ethics in System Development

## 1.2 Khushbu Panchal

☐ Feasibility Study

☐ Types of Analysis

☐ Constbenifit Analysis

☐ The Process And Stages of System Design

☐ System Design

☐ HIPO and IPO Charts

☐ Tools of Structured Analysis

# 2 Programming In Java

## 2.1 Ruchita Tailor (Herbert Schildt except Java applet)

☐ Chapter 3 : Data Types, Variables, and Arrays

☐ Chapter 5 : Control Statement

☐ Chapter 7 : A closer Look at Methods and Classes

☐ Chapter 8 : Inheritance

- ☐ Chapter 9 : Packages and Interfaces
- ☐ Java Applets PDF

# 3 Rational Database and Management Systems

## 3.1 Ruchita Tailor

- ☐ Unit 1 : Introduction To RDBMS
- ☐ Unit 2 : Data Architecture
- ☐ Unit 3 : Data Models
- ☐ Normalization
- ☐ Chap 7 : Relational Data Model
- ☐ Chap 8 : Relational Algebra
- ☐ Chap 9 : Functional Dependency

## 3.2 Khushbu Panchal

- ☐ SQL Operators
- ☐ Definitions
- ☐ Functions
- ☐ Grant and Revoke
- ☐ Index
- ☐ Joins
- ☐ Relational Algebra
- ☐ Oracle Basic Query
- ☐ View

# 4   Computer Networks

## 4.1   Ruchita Tailor

☐ Network Security

☐ Cryptography

☐ DNS

## 4.2   Khushbu Panchal

☐ Network Interface Card (NIC)

☐ Software for network

## 4.3   Jyoti Verma

- N/A

# 5   Fundamentals Of Operating System

## 5.1   Ruchita Tailor

☐ Unit 1 : Introduction to OS

☐ Unit 2 : Process Management And Threads

☐ Unit 3 : IPC (Inter Process Communication)

☐ Memory Management

☐ File Management