

## UNIT - 8

**A GENERIC DIGITAL SWITCHING SYSTEM MODEL:** Introduction, Scope, Hardware architecture, Software architecture, Recovery strategy, Simple call through a digital system, Common characteristics of digital switching systems. Analysis report. Reliability analysis.

### TEXT BOOKS:

1. **Telecommunication and Switching, Traffic and Networks** - J E Flood: Pearson Education, 2002.
2. **Digital Switching Systems**, Syed R. Ali, TMH Ed 2002.

### REFERENCE BOOK:

1. **Digital Telephony** - John C Bellamy: Wiley India India Pvt. Ltd, 3<sup>rd</sup> Ed, 2008.

## ELECTIVE -4 (GROUP D)

### DISTRIBUTED SYSTEM

Subject Code	: 10EC831	IA Marks	: 25
No. of Lecture Hrs/Week	: 04	Exam Hours	: 03
Total no. of Lecture Hrs.	: 52	Exam Marks	: 100

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## UNIT - 1

**CHARACTERIZATION OF DISTRIBUTED SYSTEMS:** Introduction, Examples of distributed systems, Resource sharing and the web, Challenges.

## UNIT - 2

**SYSTEM MODELS:** Introduction, Architectural models, Fundamental mode.

## UNIT - 3

**INTERPROCESS COMMUNICATION:** Introduction, The API for the internet protocols, External data representation and marshalling, Client-server communication, Group communication.

## UNIT - 4

**DISTRIBUTED OBJECTS AND REMOTE INVOCATION:** Introduction, Communication between distributed objects, Remote procedure call, Events and notifications.

#### UNIT - 5

**SECURITY:** Introduction, Overview of security technique cryptographic algorithms, Digital signature, Cryptography pragmatics.

#### UNIT - 6

**TIME & GLOBAL STATES:** Introduction, Clocks, Events, Process states, Synchronizing physical clocks, Global states, Distributed debugging.

#### UNIT - 7

**COORDINATION AND AGREEMENT:** Distributed mutual exclusion, Elections, Multicast communication.

#### UNIT - 8

**CORBA CASE STUDY:** Introduction, CORBA RMI, CORBA Services.

#### TEXT BOOK:

1. **"Distributed Systems, Concepts & Design"**, George Coulouris, Jean Dollimore, Tim Kindberg, fourth edition, 2006. Pearson education.

#### REFERENCE BOOK:

1. **"Distributed System Architecture, a Middleware Approach"** Arno puder, Kay Romer, Frank Pilhofer, Morgan Kaufmann publishers.

### NETWORK SECURITY

Subject Code	: 10EC832	IA Marks	: 25
No. of Lecture Hrs/Week	: 04	Exam Hours	: 03
Total no. of Lecture Hrs.	: 52	Exam Marks	: 100

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#### UNIT - 1

Services, mechanisms and attacks, The OSI security architecture, A model for network security.