

Face to Face.....

IT - SM Made Simple With OM TRIVEDI



Know Your Faculty

- Faculty Member of ICAI.
- Alumnus of Indian Institute of Management – Kolkata.
- More than 8 years' teaching experience in CA course.
- A renowned author of best-selling CA books, a corporate speaker and an educationist.
- Expert on competition studies, value creation, competitive advantages, management information systems and process improvement techniques.
- Management consultant and advisor to several Indian and multinational companies.
- Worked with eminent MNC's like Thomson, Firewall, Macmillan and McGraw-Hill.
- Partner with LexisNexis India (A Reed Elsevier Group Company) and MD of Carvinowledge Press.
- With an experience of more than a decade in industry, he has huge exposure to the dynamics of various organizations.
- I am still chasing "Perfection".

Author of Best-Selling Books



Plan

Innovate

Learn

Excel

My experience will give you "TOOLS TO CLIMB"

QUICK BITES

Information Technology and Strategic Management

[For CA-Intermediate (IPC) Course]

Om S Trivedi

Faculty Member of ICAI, New Delhi
EPSM – Indian Institute of Management Calcutta (IIMC)

Edited by

Eesha Narang

MA (English), M.Phil.
Delhi University



E-mail: omtrivedi@ymail.com

www.carvinowledge.com



Quick Bites Information Technology and Strategic Management

© Carvinowledge Press, 2017

All rights reserved. No part of this publication may be reproduced or transmitted, in any form or by any means, without permission. Any person who commits any unauthorised act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

Published by Eesha for Carvinowledge Press

Carvinowledge Press

B-8/GM-4, DLF Colony, Dilshad Extn.-II

Bhopura, Ghaziabad-201005

Mobile: +91-9953922272, +91-9953878636

E-mail: info@carvinowledge.in

www.carvinowledge.com

This book is meant for educational and learning purposes. The author(s) of the book has/have taken all reasonable care to ensure that the contents of the book do not violate any existing copyright or other intellectual property rights of any person in any manner whatsoever. In the event the author(s) has/have been unable to track any source and if any copyright has been inadvertently infringed, please notify the publisher in writing for corrective action.

Contents

Part I: Information Technology

Part 1—Business Process Management and IT

<i>Chapter 1: Introduction to Business Process Management</i>	1
<i>Chapter 2: Business Process Management (BPM) Implementation and Role of IT</i>	4
<i>Chapter 3: Business Process Mapping Systems</i>	8

Part-2 Information Systems and IT Fundamentals

<i>Chapter 4: Introduction to Information Systems</i>	11
<i>Chapter 5: Computing and Other Emerging Technologies</i>	13
<i>Chapter 6: Information System Layers, Life Cycle and Modern Technologies</i>	18

Part-3 Telecommunications and Networks

25

<i>Chapter 7: Telecommunications and Networks</i>	25
<i>Chapter 8: Internet and Other Technologies</i>	40

Part-4 Business Information Systems

<i>Chapter 9: Introduction to Business Information Systems</i>	44
<i>Chapter 10: Specialized Business Information Systems</i>	50

Part-5 Business Process Automation through Application Software

<i>Chapter 11: Business Process Automation through Application Software</i>	58
---	----

Part II: Strategic Management

<i>Chapter 1: Business Environment</i>	1
<i>Chapter 2: Business Policy and Strategic Management</i>	8
<i>Chapter 3: Strategic Analysis</i>	13
<i>Chapter 4: Strategic Planning</i>	19
<i>Chapter 5: Formulation of Functional Strategy</i>	25
<i>Chapter 6: Strategy Implementation and Control</i>	29
<i>Chapter 7: Reaching Strategic Edge</i>	36

Part-3 Telecommunications and Networks

Chapter 7: Telecommunications and Networks

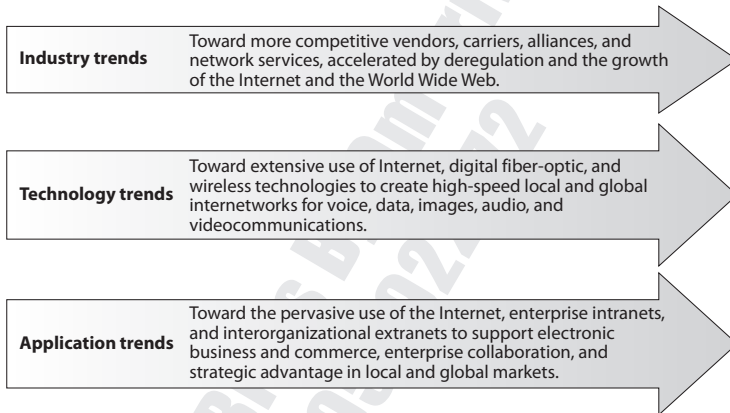
Telecommunication systems enable the transmission of data over public or private networks.

A **network** is a communications, data exchange, and resource-sharing system created by linking two or more computers and establishing standards, or protocols, so that they can work together.

Networking an Enterprise

- The primary information technology infrastructure for many enterprises is Intranet and Extranet.
- The Internet and Internet-like networks inside the enterprise are called **Intranets**, between an enterprise and its trading partners are called **Extranets**.

Trends in Telecommunication



The Business Value of Telecommunications

- | | |
|---------------------------------|---------------------------------|
| a) Overcome geographic barriers | c) Overcome cost barriers |
| b) Overcome time barriers | d) Overcome structural barriers |

Telecommunication Network

A **telecommunications network** is a collection of terminal nodes, links and any intermediate nodes which are connected so as to enable telecommunication between the terminals.

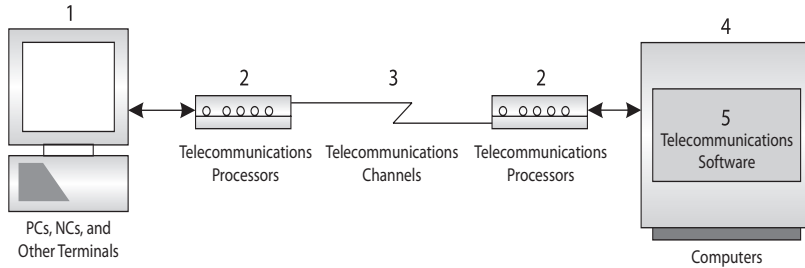
Advantages of a Computer Network in an Organization

- | | |
|---------------------|---------------------------------|
| a. File Sharing | d. Shared Databases |
| b. Resource Sharing | e. Fault Tolerance |
| c. Remote Access | f. Internet Access and Security |

Telecommunication Network Model

The five basic components in a telecommunications network:

- terminals
- telecommunications processors
- tele communications channels
- computers, and
- telecommunications software.



Terminals

Any input or output device that is used to transmit or receive data can be classified as a terminal component.

Telecommunications Processors

Network Interface Card (NIC) is a computer hardware component that connects a computer to a computer network. It has additional memory for buffering incoming and outgoing data packets, thus improving the network throughput.

Modems is A device that converts signals the computer understands into signals that can be accurately transmitted over the phone to another modem, which converts the signals back into their original form.

Multiplexers is a device that combines large number of low speed transmission lines into high speed line.

Internetwork Processors

Switch: Each **switch** contains a certain number of ports, typically 8 or 16.

Router is a communications processor that interconnects networks based on different rules or protocols, so that a telecommunications message can be routed to its destination.

Routing is the process of deciding on how to communicate the data from source to destination, in a network.

Hub is a port-switching communications processor. This allows for the sharing of the network resources such as servers, LAN workstations, printers, etc.

Bridge is a communication processor that connects number of Local Area Networks (LAN). It magnifies the data transmission signal while passing data from one LAN to another.

Repeater is a communications processor that boosts or amplifies the signal before passing it to the next section of cable in a network.

Gateway is a device that connects dissimilar networks.

Telecommunications Media/Channels

Guided Media

In the guided transmission medium, the waves are prorogated along a solid medium, such as copper twisted pair cable, co-axial cable, and optical Fiber.

The most common types of media are:

- Twisted Pair Copper Cable
- Coaxial Copper Cable
- Fibre Optic Cable

Unguided Media

Unguided Transmission Media is a means of free data transmission that flow through the air. This kind of transmission is not guided or bounded to a channel to follow.

- Terrestrial Microwave
- Radio Waves
- Micro Waves
- Infrared Waves
- Communication Satellites

Types of Telecommunications Networks

Class I

Area Coverage Based Classification

- Local Area Network (LAN)
- Metropolitan Area Network (MAN)
- Wide Area Network (WAN)

Class II

Functional Based Classification

- Client-Server
- Peer-to-Peer
- Multi-Tier

Class III

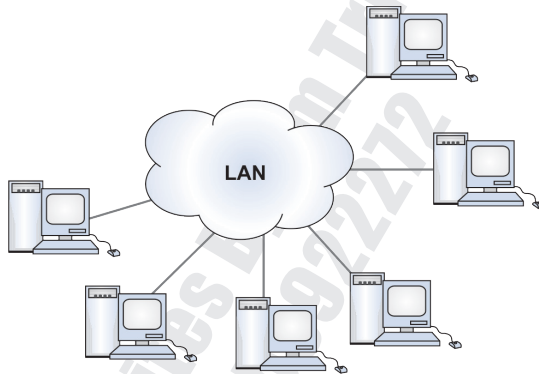
Ownership-based Classification

- Public Network
- Private Network
- Virtual Private Network (VPN)

Area Coverage Based Classification

Local Area Network (LAN)

A **Local Area Network (LAN)** is a group of computers and network devices connected together, usually within the same building, campus or spanned over limited distance. It provides high speed data transfer and is relatively inexpensive.



Wide Area Networks (WAN)

A **Wide Area Network (WAN)** is not restricted to a geographical location, although it might be confined within the bounds of a state or country. The Internet is an example of a world-wide public WAN.



Metropolitan Area Networks (MAN)

A metropolitan area network or MAN is a network that is smaller than a typical WAN but larger than a LAN (roughly 40 km in length).

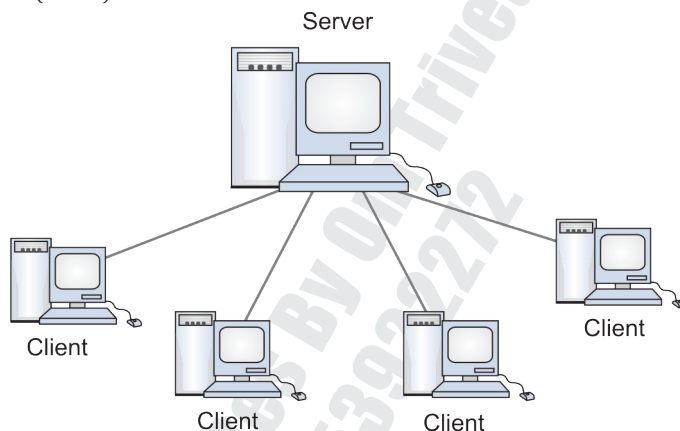
Functional Based Classification

Client-Server Networking

A network that relies on dedicated servers is sometimes called a **client/server network**.
Ex: Banks, Railway, internet etc.

Client-Server Networking: Client/server networks have become the predominant information architecture of enterprise wide computing.

- This is a computing environment where end user workstations (clients) are connected to micro or mini LAN (servers) or possibly to a mainframe (super server).
- Local area networks (LANs) are also interconnected to other LANs and wide area networks (WANs) of client workstations and servers.



Clients

In a client/server network, end-user PC or NC workstations are the clients.

Client computers can be classified as

- Fat Client
- Thin Client
- Hybrid Client.

Server

A **server** is one or more multi-user processors with shared memory providing computing, connectivity and the database services and the interfaces relevant to the business need.

Characteristics and Issues of Client Server (C/S) Architecture

Some of the prominent characteristics of C/S architecture are as follows:

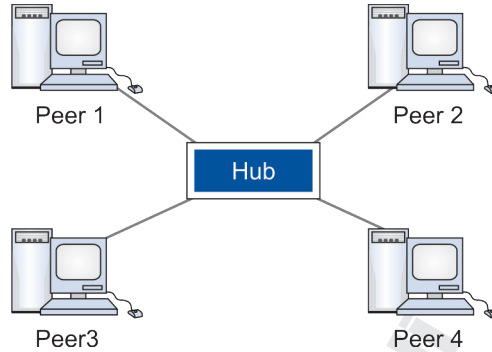
- Service
- Shared Resources
- Transparency of Location
- Mix-and-Match
- Scalability
- Integrity

Issues in Client/Server Network

- i. When the server goes down or crashes, all the computers connected to it become unavailable to use.
- ii. Simultaneous access to data and services by the user takes little more time for server to process the task.

Peer to Peer model

Other networks take an alternative approach, enabling any computer on the network to function as both a client and a server. Thus, any computer can share its printers and hard drives with other computers on the network. And while a computer is working as a server, you can still use that same computer for other functions such as word processing. This type of network is called a **peer-to-peer network**.



Multi-Tier Architecture

Single Tier Systems

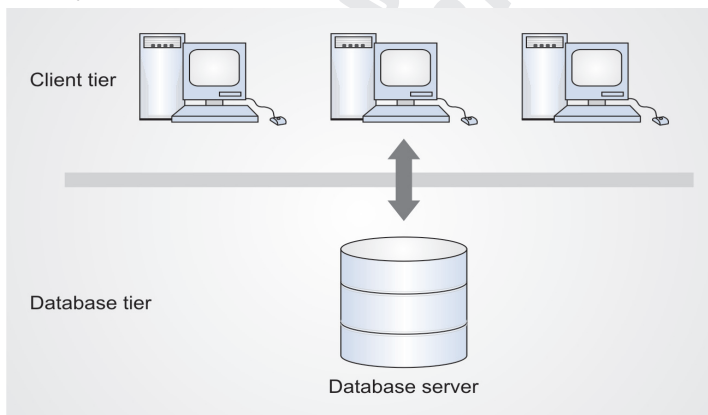
Generally, this type of system is used in small businesses.

A **single computer** that contains a database and a front end to access the database is known as single-tier.

Two-Tier Architecture

A **two-tier system** consists of a client and a server.

In **two-tier system** database is stored on the server and this is accessed on the client.



3-tier and n tier Architecture

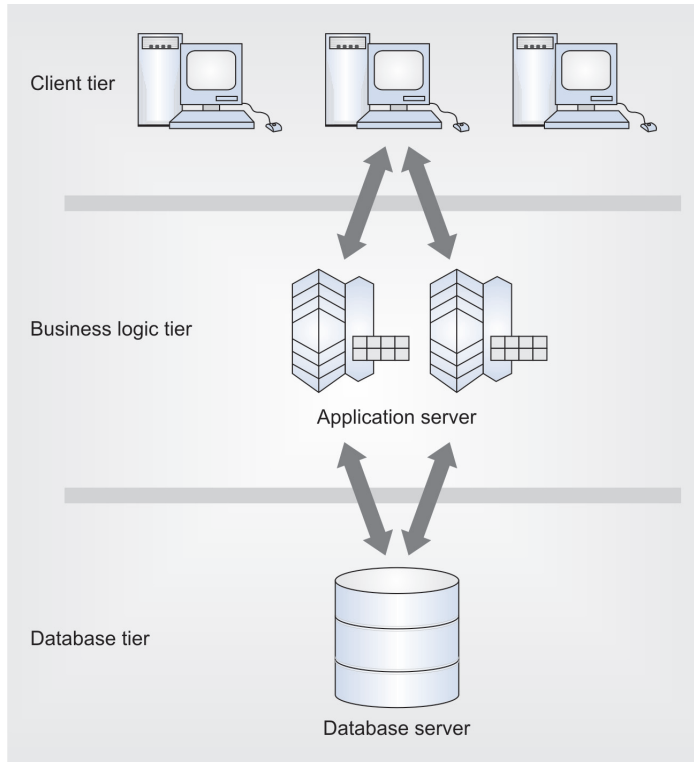
The **three-tier** architecture emerged in 1990s to overcome the limitations of the two-tier architecture.

The **third tier architecture (middle tier server)** is between the user interface (client) and the data management (server) components.

Why 3-tier?

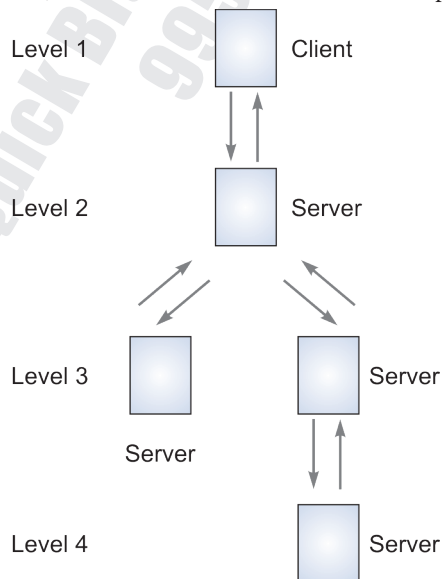
3-tier architecture

- i. Client-tier is responsible for the presentation of data, receiving user events and controlling the user interface
- ii. Application-server-tier protects the data from direct access by the clients.
- iii. Data-server-tier is responsible for data storage.



N-Tier Architecture

To extend 3-tier to an n-tier, the middle tier can be allowed to have multiple application objects.



Ownership Based Classification

Public Data Network

A public data network is defined as a network shared and accessed by users not belonging to a single organization. It is a network established and operated by a telecommunications administration, or a recognized private operating agency.

Private Data Network

Private data networks provide businesses, government agencies and organizations of all sizes a dedicated network to continuously receive and transmit data critical to both the daily operations and mission critical needs of the organization.

Virtual Private Network

A virtual private network (VPN) emulates a private network over public or shared and therefore insecure infrastructures. It consists of two or more internal networks (or intranets) which can communicate securely as if all internal hosts from different intranets belonged to the same virtual network.

Types of VPN

- i. **Remote-access:** This is a user-to-LAN connection used by a company that needs to connect to the private network from various remote locations.
It is also called as Virtual Private Dial-Up Network (VPDN).
- ii. **Site-to-Site VPN:** Through the use of dedicated equipment and large-scale encryption, a company can connect multiple fixed sites over a public network such as Internet. Site-to-site VPNs can be one of the following two types:
 - a. Intranet based:
 - b. Extranet based:

Network Computing

This **network computing** or network centric concept views networks as the central computing resource of any computing environment.

Centralized Computing: Centralized computing is computing done at a central location, using terminals that are attached to a central computer.

Decentralized Computing: Decentralized computing is the allocation of resources, both hardware and software, to each individual workstation, or office location which are capable of running independently of each other.

Network Topology

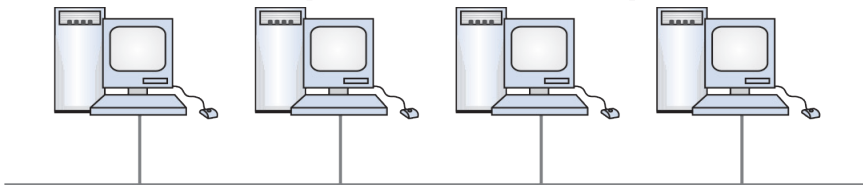
The term network topology refers to the arrangement in which the computers and other network components are connected to each other. There are two important terms related with network topologies:

- **Node:** A node is a device that is connected to the network.
- **Packet:** A packet is a message that is sent over the network from one node to another node.

Bus Topology

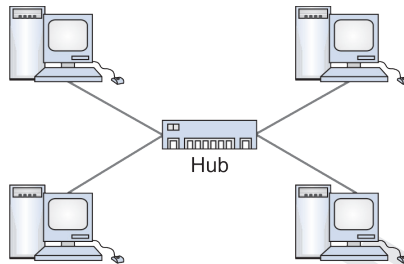
Bus topology is commonly used for LANs.

In a bus topology, every node on the network can see every packet that is sent on the cable. Each node looks at each packet to determine whether the packet is intended for it.

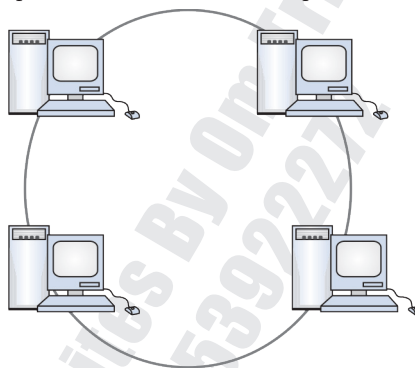


Star Topology

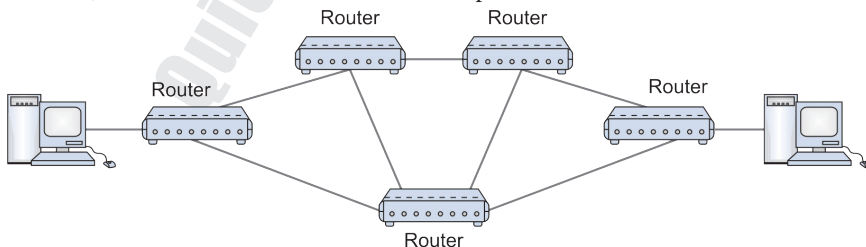
In a star topology, each network node is connected to a central device called a hub or a switch, Star topologies are also commonly used with LANs.

**Ring Topology**

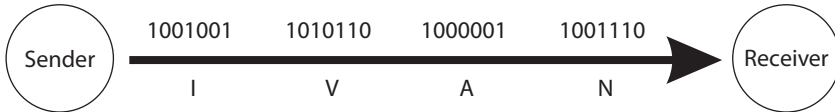
In a ring topology, packets are sent around the circle from computer to computer. Each computer looks at each packet to decide whether the packet was intended for it.

**Mesh Topology**

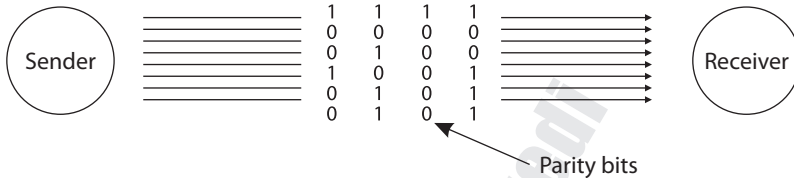
Mesh, has multiple connections between each of the nodes on the network, Mesh networks are not very practical in a LAN setting. However, mesh networks are common for metropolitan or wide area networks.

**Transmission Technologies**

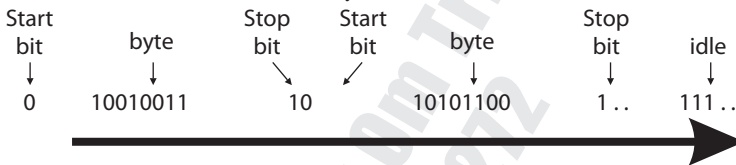
Serial Transmission: In serial transmission, the bits of each byte are sent along a single path one after another



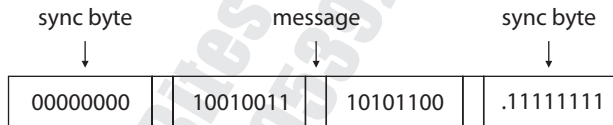
Parallel Transmission: In parallel transmission, there are separate, parallel paths corresponding to each bit of the byte so that all character bits are transmitted simultaneously. Centronic port is the example of parallel port used for printer.



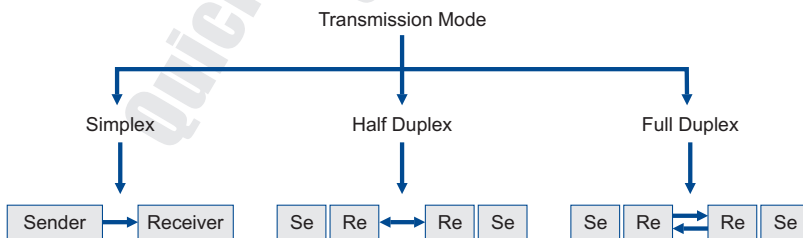
Asynchronous Transmission: In this, each character is sent at irregular intervals in time as in the case of characters entered at the keyboard in real time.



Synchronous Transmission: In this, the transmitter and receiver are paced by the same clock. The receiver continuously receives (even when no bits are transmitted) the information at the same rate the transmitter sends it.



Transmission Modes



a) Simplex Mode

In this data is communicated in one direction only from sender to receiver.

e.g. TV, Radio Communication,

b) Half Duplex

In this mode data can be communicated in both the direction but one at a time.

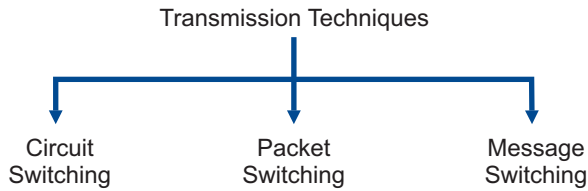
Example: Walky – Talky

c) Full Duplex

In this mode data is communicated in both the direction simultaneously.

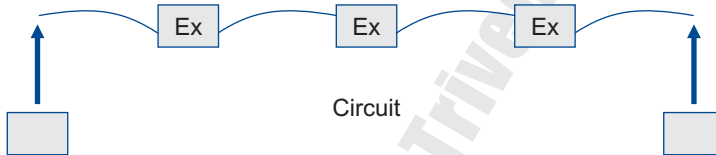
Example: Voice communication over the telephone.

Transmission Techniques



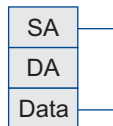
(i) Circuit Switching

- a. In this transmission technique a permanent path is established between sender and receiver for the duration of data communication.
- b. Circuit switching is the oldest technique



(ii) Packet Switching

- a. Packet switching is the latest technique of data communication.
- b. In this technique the data is communicated in the form of packets between sender and receiver.

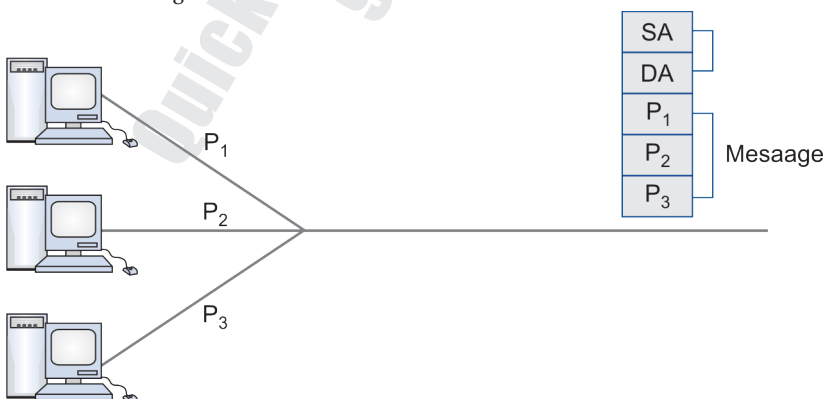


SA – Source Sender Address

DA – Destination Address

(iii) Message Switching

- a. Message switching is an extension of packet switching.
- b. In this technique many packets of common destinations are combined together in the form of a message for communication to a common destination.



Network Architecture

Protocols

A protocol defines the following three aspects of digital communication:

- a. Syntax** **b. Semantics** **c. Timing**

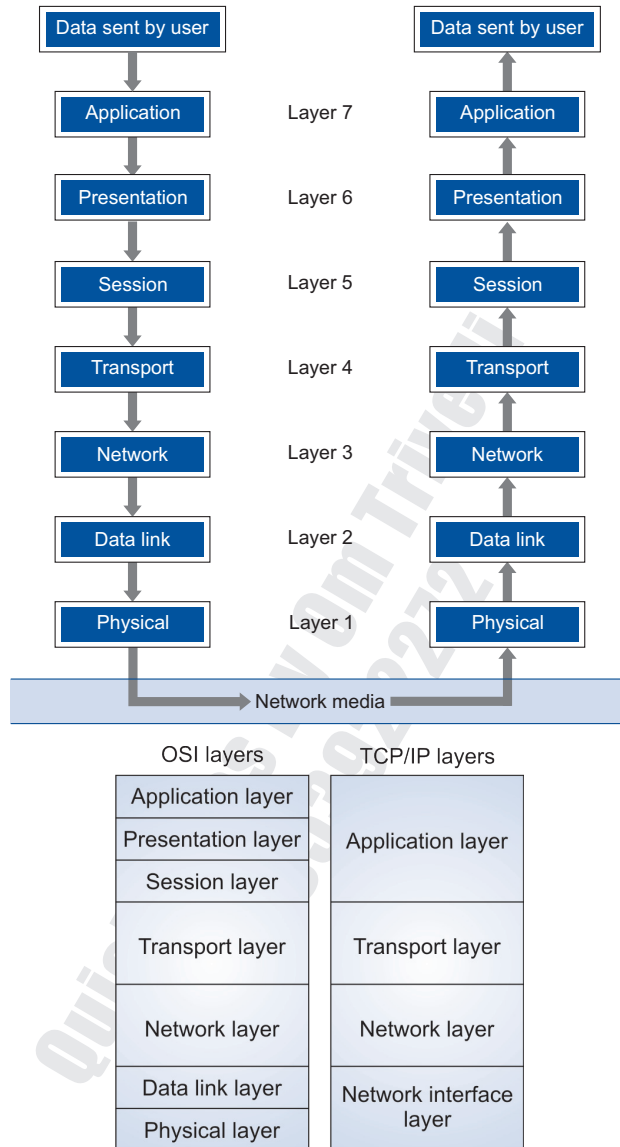
- X.12 standard protocol for electronic data interchange (EDI).
- X.75 interconnection between networks of different countries.
- XON/OFF – standard for micro computer data communication.
- TCP/IP – protocol being used in internet.

The first three layers are sometimes called the lower layers.

Open Systems Interconnection Reference Model, affectionately known as the OSI model breaks the various aspects of a computer network into seven distinct layers.

The OSI model specifies what aspects of a network's operation can be addressed by various network standards.

Layer	Name	Description
1	Physical	Governs the layout of cables and devices such as repeaters and hubs.
2	Data Link	Provides MAC addresses to uniquely identify network nodes and a means for data to be sent over the Physical layer in the form of packets. Bridges and switches are layer 2 devices.
3	Network	Handles routing of data across network segments.
4	Transport	Provides for reliable delivery of packets.
5	Session	Establishes sessions between network applications.
6	Presentation	Converts data so that systems that use different data formats can exchange information.
7	Application	Allows applications to request network services.



Network Risks, Controls and Security

There are two types of systems security.

- a. A **physical security** is implemented to protect the physical systems assets of an organization like the personnel, hardware, facilities, supplies and documentation.
- b. A **logical security** is intended to control
 - i. malicious and non-malicious threats to physical security and
 - ii. malicious threats to logical security itself.

Importance of Network Security

- To protect company assets
- To gain a competitive advantage
- To comply with regulatory requirements and judicial responsibilities
- To keep your job

Threats and Vulnerabilities

Threats

A threat is anything that can disrupt the operation, functioning, integrity, or availability of a network or system.

Types of Network Security threats:

- i. **Unstructured Threats:** These threats originate mostly from inexperienced individuals using easily available hacking tools from the Internet.
- ii. **Structured Threats:** These threats originate from individuals who are highly motivated and technically competent and usually understand network systems design and the vulnerabilities of those systems.
- iii. **External Threats:** These threats originate from individuals or organizations working outside an organization, which does not have authorized access to organization's computer systems or network.
- iv. **Internal Threats:** These threats originate from individuals who have authorized access to the network.

Vulnerabilities

A vulnerability is an inherent weakness in the design, configuration, or implementation of a network or system that renders it susceptible to a threat.

Facts responsible for vulnerabilities in the software:

- | | |
|--------------------------------------|---------------------------------------|
| i. Software Bugs | iv. Bad Protocols |
| ii. Timing Windows | v. Trusting Untrustworthy information |
| iii. Insecure default configurations | vi. End users |

Level of Security

Step 1: Preparing project plan for enforcing security

Step 2: Assets identification

Step 3: Assets valuation

Step 4: Threats Identification

Step 5: Assessment of probability of occurrence of threats

Step 6: Exposure analysis

Step 7: Controls adjustment

Step 8: Report generation

Network Security Protocols

Cryptography

Cryptography is the study of techniques related to all aspects of data security.

Within the context of any application-to-application communication, there are some specific security requirements, including:

- | | |
|---------------------------|-------------------|
| ■ Authentication | ■ Integrity |
| ■ Privacy/confidentiality | ■ Non-repudiation |

Encryption

Encryption is the process of transforming information (referred to as plaintext) to make it unreadable to anyone except those possessing special knowledge, usually referred to as a key. Simply it is the changing of plain text into ciphertext

Decryption: The reverse procedure of encryption is called decryption when Cipher text is applied to decryption also than original plaintext is generated. Keys are used to either encrypt or decrypt a message. These keys contain secret values consisting of complex mathematical formulae (algorithms).

There are two basic approaches to encryption:

- i. **Hardware encryption**
- ii. **Software encryption**

Network Security Protocols

Secure Shell (SSH): Secure Shell is a program to log into another computer over a network, to execute commands in a remote machine, and to move files from one machine to another.

Secure File Transfer Protocol (SFTP): The SSH File Transfer Protocol (also known as Secure FTP and SFTP) is a computing network protocol for accessing and managing files on remote file systems.

Secure Hypertext Transfer Protocol (HTTPS): Hypertext Transfer Protocol Secure (HTTPS) is a communications protocol for secure communication over a computer network, with especially wide deployment on the Internet.

Secure Socket Layer (SSL): It is essentially a protocol that provides a secure channel between two machines operating over the Internet or an internal network.

Network Security Techniques

Firewalls

Firewalls are systems which control the flow of traffic between the Internet and the Firm's internal LANs and systems.

A Firewall is a proven and effective means of protecting the Firm's internal resources from unauthorized and unwanted intrusion.

Message Authentication: It makes sure that a message is really from whom it purports to be and that it has not been tampered with. Regardless

Site Blocking

Site Blocking is a software-based approach that prohibits access to certain Web sites that are deemed inappropriate by management.

Intrusion Detection System (IDS)

Meaning: The goal of intrusion detection system is to monitor the network assets, to detect anomalous behavior and misuse.

Components of IDS

- i. **Network Intrusion Detection (NID):** Network intrusion detection deals with information passing in the wire between hosts. Typically referred to as "packet-sniffers," Network intrusion detection devices intercept packets traveling in different communication channels.
- ii. **Host-based Intrusion Detection (HID):** Host-based intrusion detection systems are designed to monitor, detect and respond to user and system activity and attacks on a given host.
- iii. **Hybrid Intrusion Detection (HID):** Hybrid intrusion detection systems offer management of and alert notification from both network and host-based intrusion detection devices.
- iv. **Network-Node Intrusion Detection (NNID):** Network-node intrusion detection was developed to work around the inherent flaws in traditional NID. Network-node pulls the packet-intercepting technology from the wire and puts it on the host.

Network Administration and Management

Network management refers to the activities, methods, procedures, and tools that pertain to the operation, administration, maintenance, and provisioning of networked systems.

- Network management
- Operation
- Administration
- Maintenance
- Provisioning
- Administration deals with keeping track of resources in the network and how they are assigned. It includes all the “housekeeping” that is necessary to keep the network under control.
- Maintenance is concerned with performing repairs and upgrades

Network Management Functions

- Fault Management
- Configuration Management
- Accounting Management
- Performance Management
- Security Management

Chapter 8: Internet and Other Technologies

The Internet has become the largest and most important network of networks today and has evolved into a global information superhighway.

Internet Applications

- ❑ E-mail, browsing the sites on the World Wide Web, and participating in special interest newsgroups are the most popular Internet applications.
- ❑ Electronic commerce transactions between businesses and their suppliers and customers can also be performed with online web applications.

General Use of the Internet

- | | | | |
|------------|--------------|-----------------|---------------|
| i. Surf | iii. Discuss | v. Buy and Sell | vii. Compute |
| ii. e-Mail | iv. Publish | vi. Download | viii. Connect |

Business Use of the Internet

- ❑ Strategic business alliances
- ❑ Providing customer and vendor support
- ❑ Collaboration among business partners
- ❑ Buying and selling products and services
- ❑ Marketing, sales, and customer service applications
- ❑ Growth of cross-functional business applications
- ❑ Emergence of applications in engineering, manufacturing, human resources and accounting.
- ❑ Enterprise communications and collaboration
- ❑ Attracting new customers with innovative marketing and products.
- ❑ Retaining present customers with improved customer service and support.
- ❑ Developing new web-based markets and distribution channels for existing products.
- ❑ Developing new information-based products

Intranets and Extranets

Intranet

An **intranet** is an internal corporate network built using Internet and World Wide Web standards and products.

Benefits of Intranet

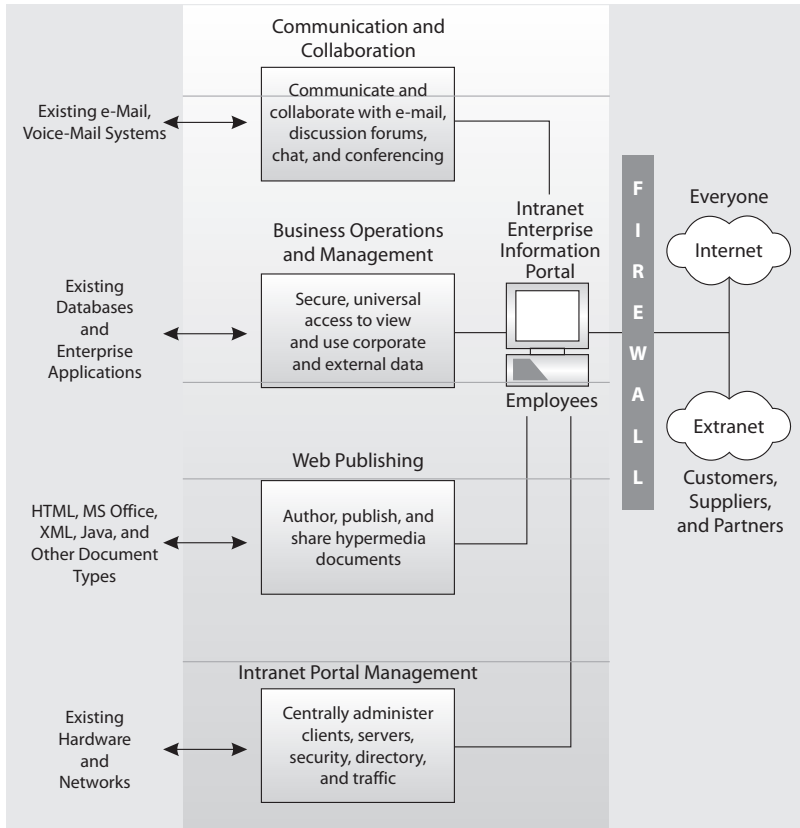
- ❑ Workforce productivity
- ❑ Time
- ❑ Communication
- ❑ Business operations and management
- ❑ Cost-effective
- ❑ Cross-platform capability

Extranet

An **extranet** extends selected resources of an intranet out to a group of its customers, suppliers, or other business partners.

Advantages of Extranet

- ❑ Exchange large volumes of data using Electronic Data Interchange (EDI).
- ❑ Share product catalogs exclusively with trade partners.
- ❑ Collaborate with other companies on joint development efforts.
- ❑ Jointly develop and use training programs with other companies
- ❑ Provide or access services provided by one company to a group of other



What is e-commerce?

Electronic commerce refers to a wide range of online business activities for products and services.

"E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals."

Types of E-commerce

B2B (Business-to-Business E-commerce)

B2B e-commerce is simply defined as e-commerce between companies. B2B stands for Business-to-Business. It consists of largest form of E-commerce. This model defines that Buyer and seller are two different entities.

B2C (Business-to-Consumer E-commerce)

Business-to-consumer e-commerce, or commerce between companies and consumers, involves customers gathering information; purchasing physical goods or information goods and, for information goods, receiving products over an electronic network. The basic concept of this model is to sell the product online to the consumers.

C2C (Consumer to Consumer E-commerce)

Consumer-to-consumer e-commerce or C2C is simply e-commerce between private individuals or consumers. It perhaps has the greatest potential for developing new markets.

C2B (Consumer-to-Business E-commerce)

A consumer posts his project with a set budget online and within hours companies review the consumer's requirements and bid on the project. The consumer reviews the bids and selects the company that will complete the project. Freelancer.com (Figure 8.7) empowers consumers around the world by providing the meeting ground and platform for such transactions.

E-Commerce General Concerns

- Loss of audit trail
- Business Continuity
- Exposure of data
- Legal Risks
- Record retention and retrievability
- Segregation of duties

Additional Concerns

Issue	Description
Reliability	Will the service level that the Company depends upon to conduct business always be available?
Scalability	How can the Internet and individual services be scaled to meet the needs and expectations of all businesses?
Ease of use	• Can methods be developed to promote easy access and use to all potential trading partners? • Will small businesses be at a disadvantage due to the lack of technical sophistication and resources?
Payment Methods	What will be an appropriate, safe, and reliable payment method for electronic commerce?

Benefits of e-Commerce Application and Implementation

- i. Reduction in costs to buyers
- ii. Reduction in errors,
- iii. Reduction in costs to suppliers
- iv. Reduction in time to complete business transactions,
- v. Creation of new markets
- vi. Easier entry into new markets,
- vii. Better quality of goods as
- viii. Faster time to market as
- ix. Optimization of resource selection
- x. Reduction in inventories
- xi. Reduction in overhead costs
- xii. Reduction in use of ecologically damaging materials
- xiii. Reduction in advertising costs.

Mobile Commerce

Mobile commerce (or m-commerce) is e-commerce where customers access the network using a mobile device such as a mobile phone, a communicator (a personal digital assistant integrated or attached to a mobile phone), or a smart phone

The advantages of m-commerce are:

- Providing wider reach.
- Reducing transaction costs.
- Competitive pricing
- Quick ordering facilities

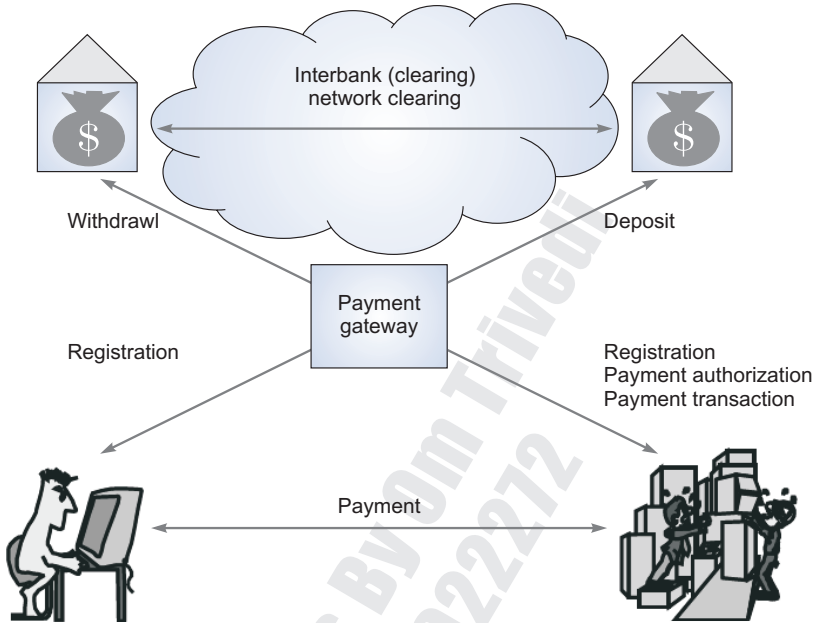
The disadvantages of m-commerce are:

- Small screens of most devices still limit types of file and data transfer (i.e. streaming videos, etc.)
- WAP and SMS limited to small number of characters and text.
- Use of graphics limited
- Cost of establishing mobile and wireless broadband infrastructure

Electronic Fund Transfer

An Electronic Payment system in general denotes any kind of network (e.g., Internet) service that includes the exchange of money for goods or services.

Electronic money has been used between banks in the form of funds transfer since 1960.



EFT Systems in Operation

Automated Teller Machines (ATMs): Consumers can do their banking without the assistance of a teller, or to make deposits, pay bills, or transfer funds from one account to another electronically.

- Point-of-Sale (PoS) Transactions
- Pre-authorized Transfers
- Telephone Transfers

"Learn Today, Lead Tomorrow"

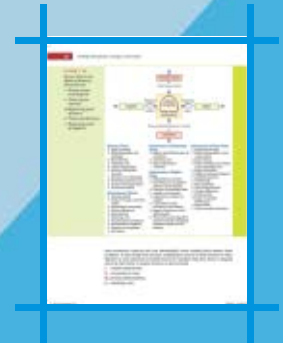
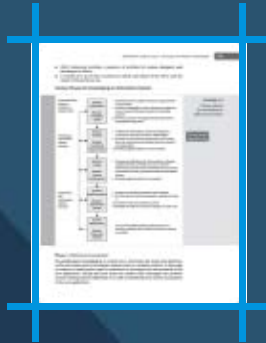
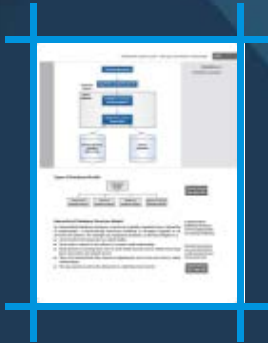
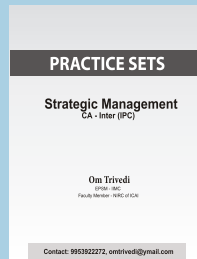
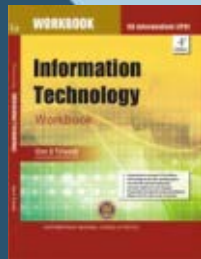
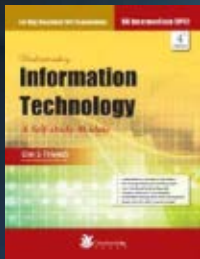
Advantage You



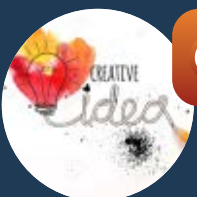
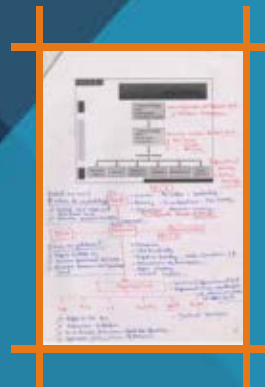
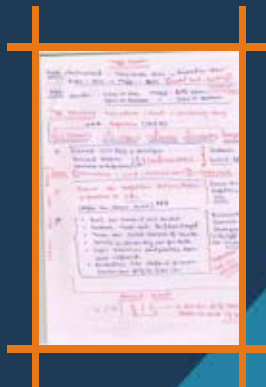
Concept Based Teaching

- Comprehensive coverage in 42 lectures
- Corporate example with Real Life Cases
- Complete coverage of SM, PM, Summary Notes and Charts

Well Designed Study Kit



Class Notes in Work Books



Memory Techniques

- Smart use of "Memory Codes" for memorization of concepts.

"Innovate through Motivation"

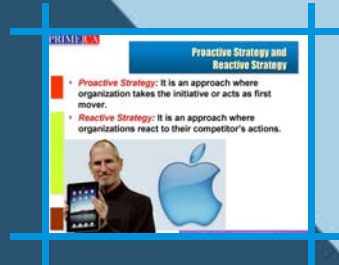
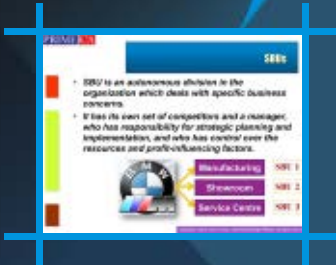
Advantage You



Audio Visual Techniques

- Use of PPTs in class at appropriate places for concept clarity.
- Smart use of Animated Videos and Videos Cases to facilitate easy learning of concepts.

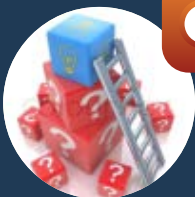
PPTs



Animated Videos

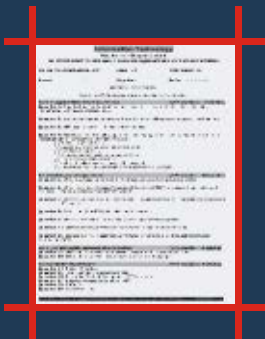


Corporate Videos Caselets



Class Test, Quick Bites, LMR, & Paper Analysis

- Chapter - wise Level I and II class tests.
- Charts and summary notes in the form of "Quick Bites" for quick revisions.
- LMR "Last Minute Revision" topics are provided just 2 days before the examination.



Class Tests



Quick Bites



LMR



Paper Analysis

"Plan to win with our study"

Advantage You

Collaboration Tools for You



- Apart from teaching in the Classroom, we facilitate you with several modes of interaction through modern interfaces and technologies.



- Social media interactions for revision and query resolutions.
- Use of Facebook Live for revision of each chapters.



- WhatsApp Groups for each batch to share all class notes, supplementary materials, etc. and query resolutions.

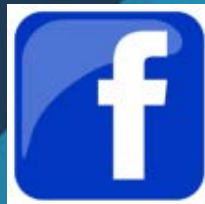


- Telephonic interaction to resolve doubts everyday between 8 to 10 pm on Om Sir's personal number.

Youtube Channel



Strategy Classes



Om Trivedi
IT-SM Classes



Prime CA



Students' Helpdesk

☎ 011-45685002

☎ 9953922272, 9953878636

☎ 9958300572

Address : D-151A, Vikas Marg, Laxmi Nagar, Delhi - 110092 India (Near Metro Gate No. 5)



Prof. OM TRIVEDI

Faculty Member of ICAI, EPSM-IIM

Author & Corporate Speaker

IT - SM

Batches for November 2017 and May 2018

"Sun Risers"

Subjects	Start Date	Days	Finish Date	Timings	Lectures	Venue
IT Then SM	21 st April, 2017	M/W/F	21 st July, 2017	6.30 to 9.30 am	42-44	NIRC of ICAI
SM Then IT	9 th June, 2017	M/W/F	27 th Aug., 2017	6.30 to 9.30 am	42-44	NIRC of ICAI
IT Then SM	24 th July, 2017	M/W/F/S	24 th Sep., 2017	6.30 to 9.30 am	42-44	NIRC of ICAI

"Smart 40"

Subjects	Start Date	Days	Finish Date	Timings	Lectures	Venue
IT Then SM	25 th May, 2017	T/T/S	31 st Aug., 2017	2.30 to 5.30 pm	42-44	Laxmi Nagar

"Game Changers"

Subjects	Start Date	Days	Finish Date	Timings	Lectures	Venue
IT Then SM	29 th May, 2017	M/W/F/S	11 th Aug., 2017	2.30 to 5.30 pm	42-44	Laxmi Nagar
SM Then IT	6 th July, 2017	M/W/F/S	8 th Sep., 2017	2.30 to 5.30 pm	42-44	Laxmi Nagar
IT Then SM	12 th June, 2017	DAILY	30 th July, 2017	5.30 to 8.30 pm	42-44	Laxmi Nagar
SM Then IT	6 th July, 2017	DAILY	31 st Aug., 2017	5.30 to 8.30 pm	42-44	Laxmi Nagar
IT Then SM	4 th Aug., 2017	DAILY	16 th Sep., 2017	5.30 to 8.30 pm	42-44	Laxmi Nagar

"Fast Track Revision" for Nov. 2017 Attempt

Options	Dates	Days	Timings	Venue
Option 1	29 th , 30 th Sep. and 1 st Oct.	Fri./Sat./Sun.	8.30 am to 4.30 pm	Laxmi Nagar
Option 2	6 th , 7 th and 8 th Oct.	Fri./Sat./Sun.	8.30 am to 4.30 pm	Laxmi Nagar

For Admission Contact:

D-151A, Vikas Marg, Near Metro Gate
No - 5, Laxmi Nagar, Delhi - 110092

☎ 011- 45685002 🌐 www.primeca.org



OM TRIVEDI CLASSES

Help Desk: **9953922272, 9958300572**

IT - SM

Made Simple

With

OM TRIVEDI

Face to Face.....



Lecture Schedules for November 2017 Batches

“INFORMATION TECHNOLOGY”

Parts	Chapters	Name of the Chapters	Lectures	Caselets	Video Cases
PART-I Business Process Management and IT	Chapter 1	Introduction to Business Process Management	2	5	3
	Chapter 2	Business Process Management Implementation and Role of IT	2	3	1
	Chapter 3	Business Process Mapping Systems	3	0	0
PART-II Information Systems and IT Fundamentals	Chapter 4	Introduction to Information Systems	2	2	1
	Chapter 5	Computing Technologies	3	5	2
	Chapter 6	Information System Layers, life Cycle and Modern Technologies	2	4	1
PART-III Telecommunication and Networks	Chapter 7	Telecommunications and Networks	4	2	1
	Chapter 8	Internet and Other Technologies	1	3	0
PART-IV Business Information Systems	Chapter 9	Introduction to Business Information Systems	1	1	1
	Chapter 10	Specialized Business Information Systems	2	4	2
PART-V Business process automation	Chapter 11	Business Process Automation through Application Software	2	6	0

“STRATEGIC MANAGEMENT”

Chapters	Name of the Chapters	No. of Lectures	No. of Caselets	No. of Video Cases
Chapter 1	Business Environment	4	14	12
Chapter 2	Business Policy and Strategic Management	2	4	3
Chapter 3	Strategic Analysis	3	9	6
Chapter 4	Strategic Planning	3	5	4
Chapter 5	Formulation of Functional Strategies	2	7	15
Chapter 6	Strategic Implementation and Control	4	11	4
Chapter 7	Reaching Strategic Edge	2	5	3

“Study Kit”

