N.B.:(1)Question no. 1 is compulsory.
(2)Answer any four out of remaining six questions.
(3)Make suitable assumptions if any.
(4)Use of steam table is permitted.

Q.No. 1. **a.***Two investment projects have following net cash flows. Compare them based on;*

(1) NPV method (Assuming discount rate of 10 %)

(2) IRR method *(10)*

Year	*Project A (IN LAKHS)*	*Project B (IN LAKHS)*
0	*-200*	*-400*
1	*40*	*120*
2	*60*	*120*
3	*50*	*120*
4	*50*	*00*
5	*40*	*100*
6	*80*	*200*

Ans:

(1) Net Present Value (NPV) Method:

$$NPV = \sum_{t=1}^{n} \frac{C_t}{(1+k)^t} - C_0 \quad \text{---------- (01)}$$

Where-

- C_0 = initial cash outlay on project
- C_t = net cash flow generated by project at time *t*
- n = life of the project
- k = required rate of return

For Project A:

C_0 = - 200 lakhs, k= 10% = 0.10, n= 06 years

$$NPV = (-200) + \frac{40}{1.10} + \frac{60}{(1.10)^2} + \frac{50}{(1.10)^3} + \frac{50}{(1.10)^4} + \frac{40}{1.10^5} + \frac{80}{1.10^6}$$

NPV = + 27.6615 lakhs.

For Project B:

C_0 = - 400 lakhs, k= 10% = 0.10, n= 06 years

$$NPV = (-400) + \frac{120}{1.10} + \frac{120}{(1.10)^2} + \frac{120}{(1.10)^3} + \frac{00}{(1.10)^4} + \frac{100}{1.10^5} + \frac{200}{1.10^6}$$

NPV = + 73.40 lakhs

Decision: Since, NPV of project B is greater than project A, therefore the project B should be ACCEPTED.

(2) Internal Rate of Return (IRR) method:

$$\sum_{t=1}^{n} \frac{C_t}{(1+k)^t} - C_0 = 0 \quad \text{---------- (02)}$$

The rate of return at which NPV of project equals to "ZERO".

Where-

- C_0 = initial cash outlay on project
- C_t = net cash flow generated by project at time *t*
- n = life of the project
- k = required rate of return

For Project A:

C_0 = -200 lakhs, n= 06 years

0 =

$$NPV = (-200) + \frac{40}{(1+k)} + \frac{60}{(1+k)^2} + \frac{50}{(1+k)^3} + \frac{50}{(1+k)^4} + \frac{40}{(1+k)^5} + \frac{80}{(1+k)^6}$$

IRR = k= 14.86%

For Project B:

C_0 = - 400 lakhs, n= 06 years

$$0 = NPV = (-400) + \frac{120}{(1+k)} + \frac{120}{(1+k)^2} + \frac{120}{(1+k)^3} + \frac{00}{(1+k)^4} + \frac{100}{(1+k)^5} + \frac{200}{(1+k)^6}$$

IRR = k= 16.00 %

Decision: As the IRR of project B is greater than project A , the project B should be ACCEPTED.

b. Explain the types of financial markets. What is role of Stock Exchange? *10*

Ans:

Functions of financial markets:

- Price discovery.
- Information aggregation & co-ordination.
- Liquidity.
- Borrowing & lending.
- Risk sharing.
- Efficiency.

Major players of financial markets:

- Brokers
- Dealers
- Invest banker
- Financial intermediaries

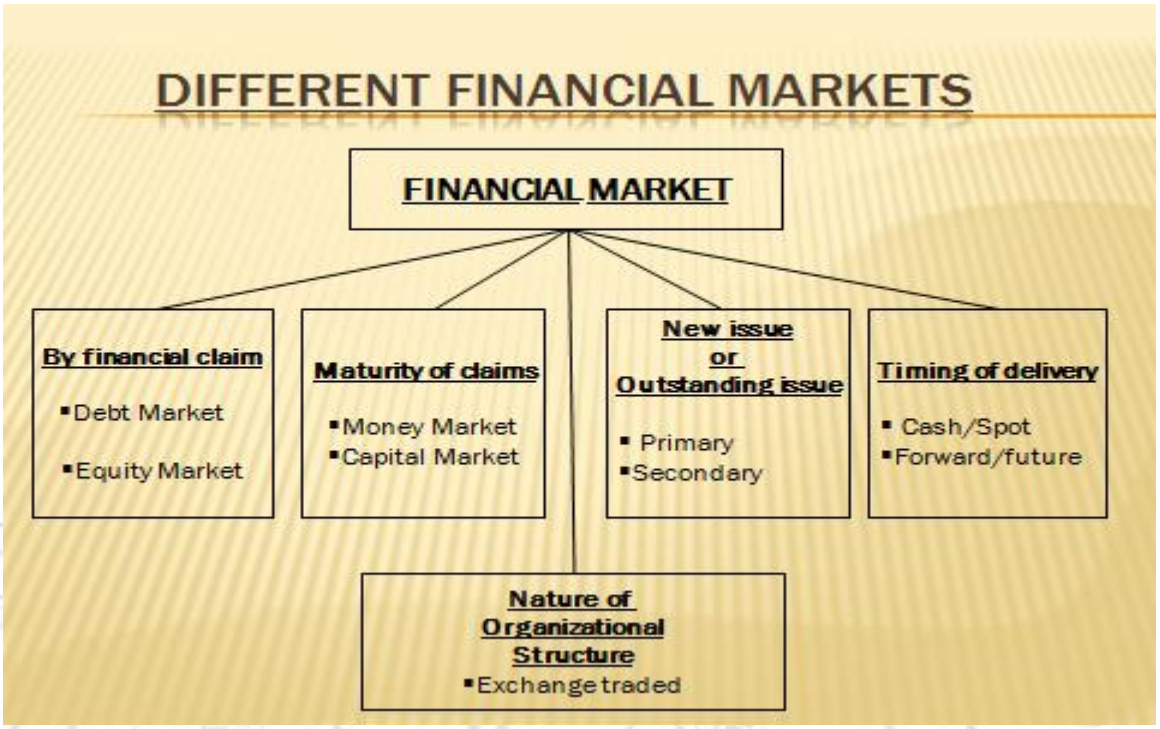


Figure- Classification of financial markets

Primary Market-
Market in which new issues of a security are sold to initial buyers.

Secondary Market-
Market in which previously issued securities are traded.

Money Market-
Market for short-term debt instruments (maturity periods of one year or less).

Capital Market-
Market for long-term securities (maturity greater than one year).

Regulations:
The Primary Market-

The Securities Act of 1933.

Firms register with the Securities Exchange Commission (SEC).

SEC has 20 days to review.

The Secondary Market-
The Securities Exchange Act of 1934:

Established the SEC.
Exchanges must register with SEC.

Company information must be available to the public.
Insider trading is regulated.

Role of stock exchange:
The principal bourses for the financial markets are the stock exchange i.e. National Stock Exchange and Bombay Stock Exchange, accounting for the bulk of Indian stock markets.

National Stock Exchange (NSE):
Established in 1994 and seeks to (a) establish a nationwide trading facility for equities, debt and hybrids (b) facility equal access to investors across the country (c) impart fairness, efficiency and transparency to securities (d) shorten settlement cycle and (e) meet international securities market standards.

Bombay Stock Exchange (BSE):
Established in 1875, the BSE is one of the oldest organized exchange in the world with long, colourful and chequered history.
The BSE switched from screen based system in 1995.
Jober plays an imp. Role on the BSE.
The NSE has adopted the "quote-driven " system and "order-driven" system of BSE.
Share listed has been classified into groups.

Q.No 2. *a. What do you mean by E-CRM? Explain E-CRM toolkit.* *10*

Ans: **E-Customer Relationship Management:**

Customer Relationship Management (CRM) is defined as the aligning of business strategy Kith the corporate culture of the organization, along with customer information and a supporting information technology of the customer interactions that promote a mutually beneficial relationship between the customer and the enterprise. Primarily, customer relationship management is a business strategy, but it is a business strategy enabled by the advances in technology.

Widespread implementation of customer information, Enterprise Resource Planning lERP) systems, sales force automation, and integrated point-of-sale systems have made customer information readily available in large volumes. Reduced costs and higher levels of performance for database management platforms allow us to gain access to this customer information and gain new insights into our customers and their behaviour through a variety of analysis methods. Advances in contact management technology and supporting infrastructure low us to take advantage of this information in increasingly cost-effective and innovative ways.

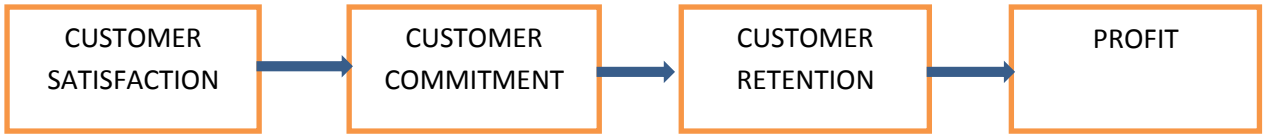


Figure 1.1: Customer satisfaction and profit.

Customer relationship Management:

Independently developed CRM capabilities within the various parts of the en usually begin based on function-specific short-term needs. Marketing begins to implement CRM with a variety of products, often combined with integrated suites to plan, execute, monitor marketing campaigns and perform database marketing. Lead management and force automation capabilities are deployed to support the field sales force. Systems to manage the supply chain and product delivery are deployed to support mass customisation and to provide up-to-the minute information about the goods in transit, to the customer service representatives and contact centres deploy sophisticated telephony and information systems to provide ongoing customer service and cross-selling.

E-CRM Solutions:

E-Customer Relationship Management or E-CRM solutions are especially valuable to companies that face the following circumstances:

1. Business is driven by mission-critical customer service requirements

2. Current costs for CRM run high

3. Large volumes of information is distributed

4. A complete customer care solution is needed.

The strategy for e-CRM can be visualized in three stages, as given in Figure 1.2.

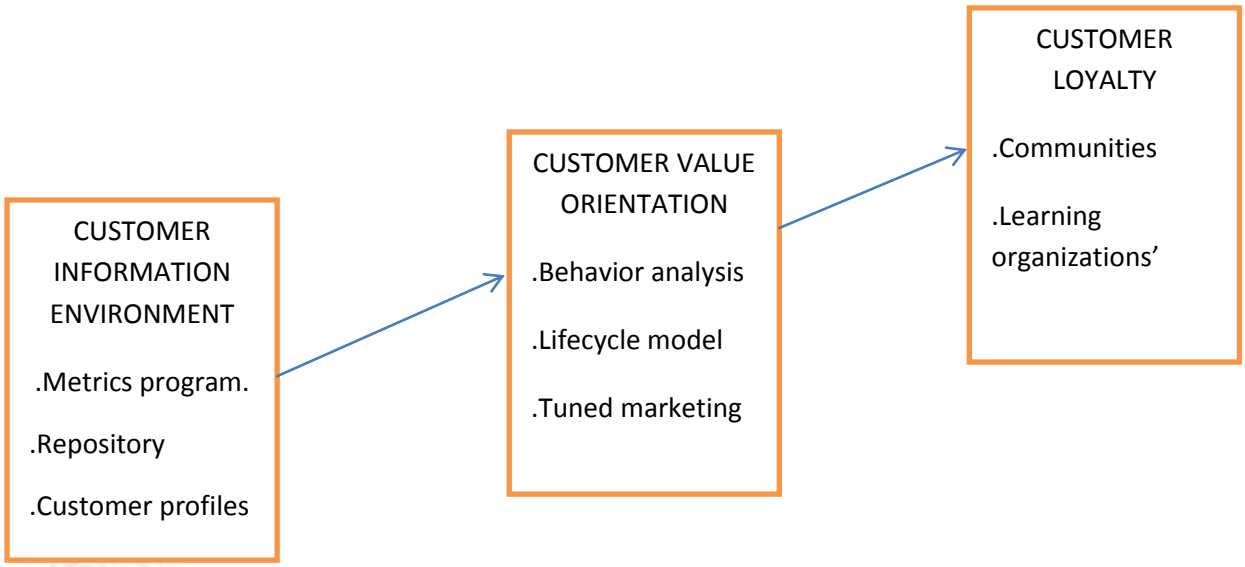


Figure 1.2- Strategies of a customer focused business.

Customer Information Environment:

In the first stage, building up of a customer information environment and acting on it forms the starting point. It consists of Metrics programmes, Customer information repository, and monitoring customer behaviours.

Customer Value Orientation:

In the second stage, operational effectiveness is the focus. Customers want value for their

money. They believe that they have got value, when the perceived benefits they receive from

something exceed the costs of owning it.

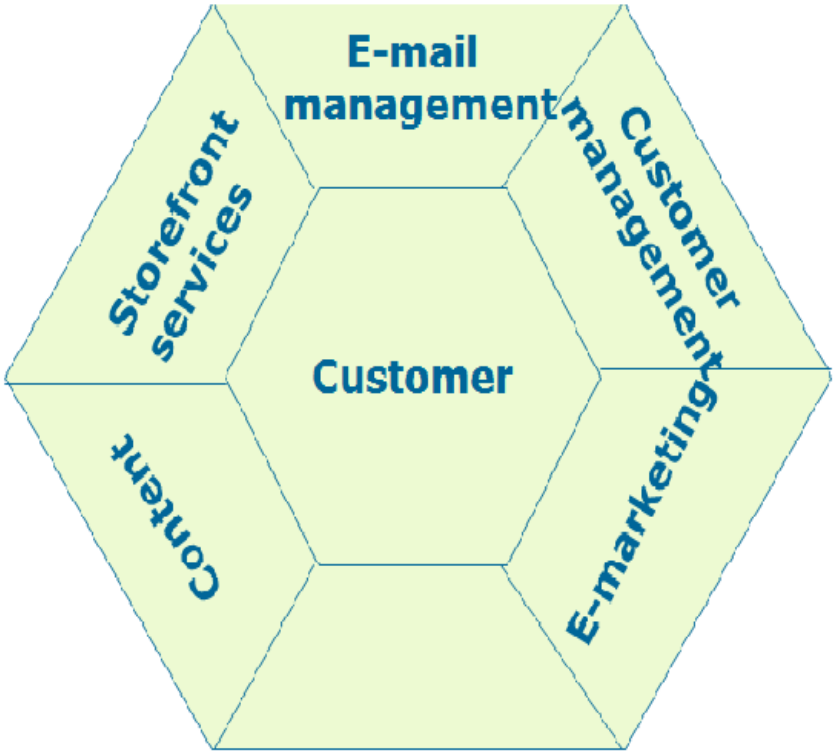


Figure 1.3- E-CRM toolkit.

Content:

Is the system delivering the contents a customer wants to see? How is it being i the IT platform?

Storefront and Merchandising Services:

With large numbers of visitors failing to complete transaction at the checkout, it i to ensure that your storefront services propel your customers to the cash poinf

E-mail Management:

Are e-mail campaigns focussed to provide an offer that customer cannot refuse? 1 these tied in with websites so that customers enjoy a seamless experience?

Customer Management:

Is the company managing data across all the sales and marketing functions to it.

E-marketing:

How well are e-marketing efforts targeted? How well do they combine with operation?

It needs only to look at the Dell business model to see how assisted selling can enhance shopping experience and achieve business success. But what assisted selling approach will work best for any company?

Q.No. 2. *b. What do you mean by Cash Conversion Cycle? Explain it's significance in working capital management.* *10*

Ans: **Cash Conversion Cycle:**

Operating Cycle (OC) consists of that period of time measured by the Average Age of Inventory (AAI) and the Average Collection Period (ACP) of accounts receivable.

Cash Conversion Cycle (CCC) completes the flow of the OC by subtracting the Average Payment Period (APP) of accounts payable.

CCC = AAI + ACP - APP

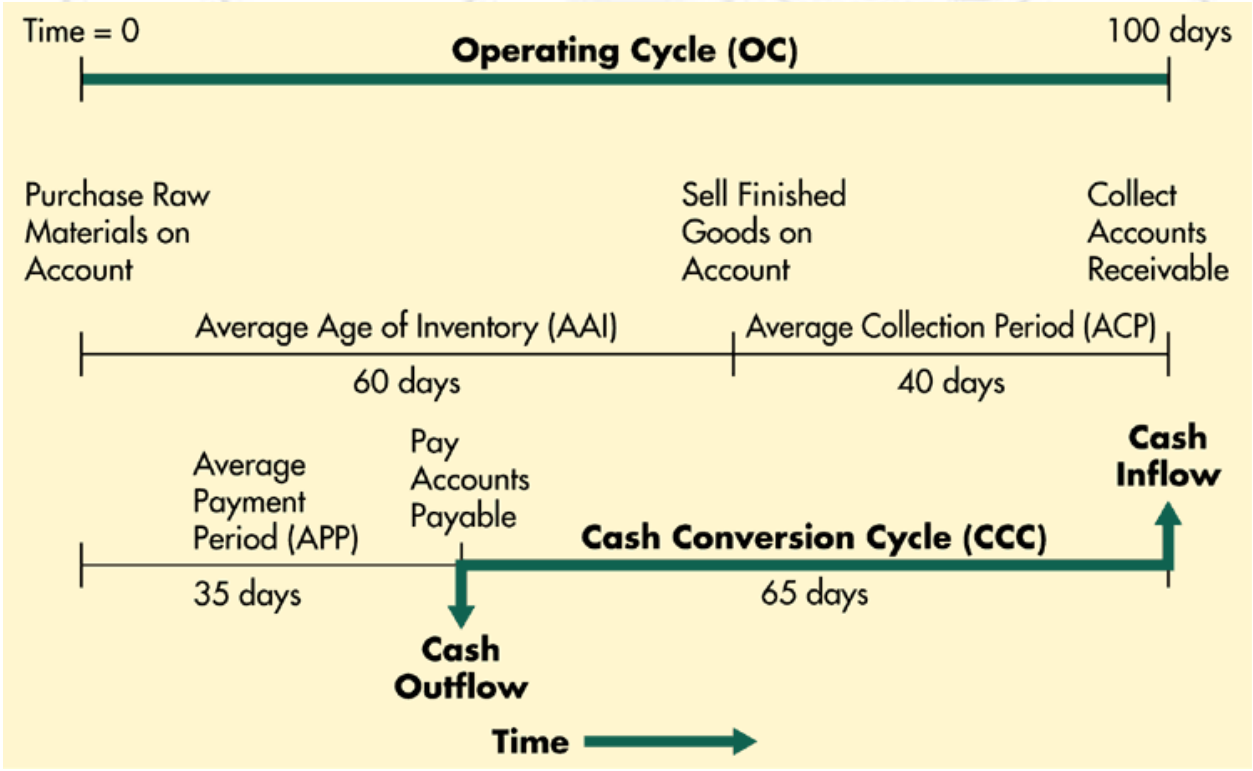


Figure: Cash Conversion Timeline

Working capital can be viewed statically as the balance between current assets and current liabilities, for example by looking at the figures for stock, debtors, cash and trade creditors provided in the annual report and accounts of company. Alternatively, as characterized by Pass and Pike (1984),(working capital can be viewed dynamically as an equilibrium between the income-generating and resource-purchasing activities of a company, in which case it is intimated & connected with the cash conversion cycle.)

The length of the cash conversion cycle depends on the length of:

•the stock conversion period;

•the debtor collection period;

•the creditor deferral period;

CCC = (stock turnover) plus (debtors' ratio) minus (creditors' ratio)

The cash conversion cycle and working capital needs:

Forecasts of working capital requirements can be based on forecasts of sales if a relationship between net working capital and sales is assumed to exist) such a relationship could be made explicit by the formulation of a policy on the level of investment in working capital management.

The stock conversion period can be reduced by shortening the length of the production cycle for example by more effective production planning or by out-sourcing part of the production process.

(The amount of stock within the production process can be reduced by using just-in-time (JIT) production methods.

Although the overall amount of working capital needed can be estimated from forecast sales and the cash conversion cycle, there is likely to be a difference between forecast activity and actual activity. There can be no substitute, then, for regularly reviewing working capital needs in the light of changing levels of activity.

The cash conversion cycle also shows where management should focus attention if it wishes to reduce the amount of cash tied up in current assets.

Q.No. 3. *a. Comment on transition to E-commerce in India with suitable examples.* *10*

Ans: **Transition to E-commerce in India:**

A pertinent question arises here about the readiness of Indian buyers for e-commerce. The proliferation of the Internet at a rapid pace and the granting of private Internet Service Provider (ISP) licences has put the market en route to a new phase. Even small and medium enterprises have been increasingly realizing the potential of the Internet.

The technological advancements happening in all spheres of life will be the driving factors for the spread of e-commerce in India, as has happened in other parts of the world The National Association of Software and Service Companies (NASSCOM) has recently released the findings of its survey conducted to evaluate the e-commerce scenario in India. E-commerce is limited in India because of the small number of Internet users in the country. Table 1.1and 1.2 give the rate of growth of Internet users in India.

TABLE 1.1

GROWTH OF INTERNET IN INDIA *(in thousands)}*

Year	*Internet subscribers*	*Internet users*
1997	25	45
1998	150	200
1999	359	1000
2000	650	2000
2001	1130	6668
2002	1763	10684
2003	3661	29000
2004	4403	31723
2005(projected)	6674	52875

The Internet and India:

The Internet has undergone a steady evolution from being a source of instant communication in the early 1990s to a rich source of infotainment and education. This evolution has been driven by the growing customer expectations with the content of Internet. Thus newer segments of Internet usage have emerged and there lie potential user segments that are still' unexplored and may emerge in the future.

According to the NASSCOM survey (Table 1.4), the total volume of e-commerce transactions in India was about Rs 450 crore in 1999-2000. Out of this volume, about Rs 50 crore were contributed by retail internet or business-to-consumer transactions, and about Rs 400 crore by business-to-business transactions. To some, Rs 450 crore of e-commerce transactions may seem to be negligible.

TABLE 1.2
TOTAL E-COMMERCE TRANSACTIONS IN INDIA

(in Rs crore)

Year	*Total e-commerce transactions*
1998-1999	131
1999-2000	450
2000-2002	1400
2006 (expected)	2300

According to the NASSCOM survey, considering the increasing interest of the governmei in the growth of the market, e-commerce in India will witness a significant jump over th next three years. Based on these preliminary findings, experts have concluded that thi penetration of the Internet and e-commerce transactions in India will increase by leaps and bounds.
.

E-commerce Opportunities for Industries:

Following are some of the areas where e-commerce is witnessing rapid growth in the global markets. Indian software and services companies need to tap into some of these vertical segments to gain the maximum advantage in the e-commerce solution sector.
1. Financial services. A large number of users use the Internet for some form of jfinancial guidance.
2. Stock trading. Online stock trading is nowadays one of the most demanding! e-commerce utilities. The ability to offer market access at a competitive price is key advantage of online stock broking companies and this is slowly happening in India too.
3. **Banking**. Internet banking is now growing. Many banks like ICICI and HDFC are making inroads into this area.
4. **Legal and professional services**. Opportunities also exist for Indian companies in legal and other professional services. There are significant legal and regulatory implications of implementing an Internet business or of migrating from a traditional off-line business. In terms of opportunities for Indian legal service providers, the requirement for professional, legal and regulatory advice is expected to increase as the number of e-commerce users increases.
5. **Tour and travel**. The travel industry has readily adapted to e-commerce. There has been a growing emphasis on the search for alternative distribution channels within the sector, particularly with the railways and the airlines, as they seek to reduce costs. These sectors have adapted well because of their online reservation systems.
6. **Healthcare**. Healthcare represents one of the biggest expenditures of governments worldwide. The Internet has the potential to enhance communications, streamline processes and create new business opportunities, by providing high-quality administrative services and integrating information systems.

TELCO-Managing supply chain:

India's largest commercial vehicle manufacturer, Tata Engineering and Locomotive Company (TELCO) started connecting, in 1999, its existing 130-strong dealer network

online with the company's Internet-based system. It also has plans to bring all its dealers for commercial vehicles and passenger cars on the company's network. Group Company Tata Technologies Limited is developing interfaces with its back-headquarters in Mumbai. It is also negotiating with a few banks to establish payment gateways between the value chain at the company-end and the banks. The effort, which has taken Rs 3. crore worth of investment in infrastructure and eight man-years of system development and implementation, is expected to help Tata Engineering cut down conventional delays in transactions. TELCO is also expecting to cut down the existing transaction time at the dealer-end by 50 per cent.

Hindustan Lever- Getting E-advertise:

As a part of the Internet initiative, Hindustan Lever has put in place a network, all its suppliers and has launched a pilot project to wire up its 7500 distribute the second phase, it will attempt the mammoth task of connecting its top n Finally, it also wants to use the Internet for

transactions. Lever sees the e opportunity not only for its own product categories but also for a larger universe of products.

Asia paints- E-transforming the information:

Asian Paints, India's largest paint company, is reaping the benefits of its investment in Internet-enabling its organization. Information Technology has been made using efficient data collection, demand forecasting, reduction in working capital and on information about material flows across factories and other locations.

CRISIL- Cost effective distribution channels:

CRISIL, the largest credit-rating agency in India, has already made its presence felt IF the new economy sector for online dissemination of its research products.

Q.No. 3. *b. List and explain the security requirement for safe E-payment.* *10*

Ans: **Risk and E-payment system:**

In Figure 1.1, the risks of e-commerce model are shown. There are three

1. Data Protection- The abuse of data related to users

2. Data Reliability- The authentication of parties involved.

3. Taxation- Issues related to tax.

Related to the above main issues is the type of legal framework in which this model works. Fraud, financial misdemeanours, and tax avoidance are not found just in electronic commerce, hit e-commerce presents new ways to commit old crimes. Electronic commerce is difficult 10 regulate for two main reasons:

1. The scope of electronic commerce, and the technology involved changes rapidly. Traditionally, the formulation of the law has been an evolutionary process, adapting to suit the needs of society.

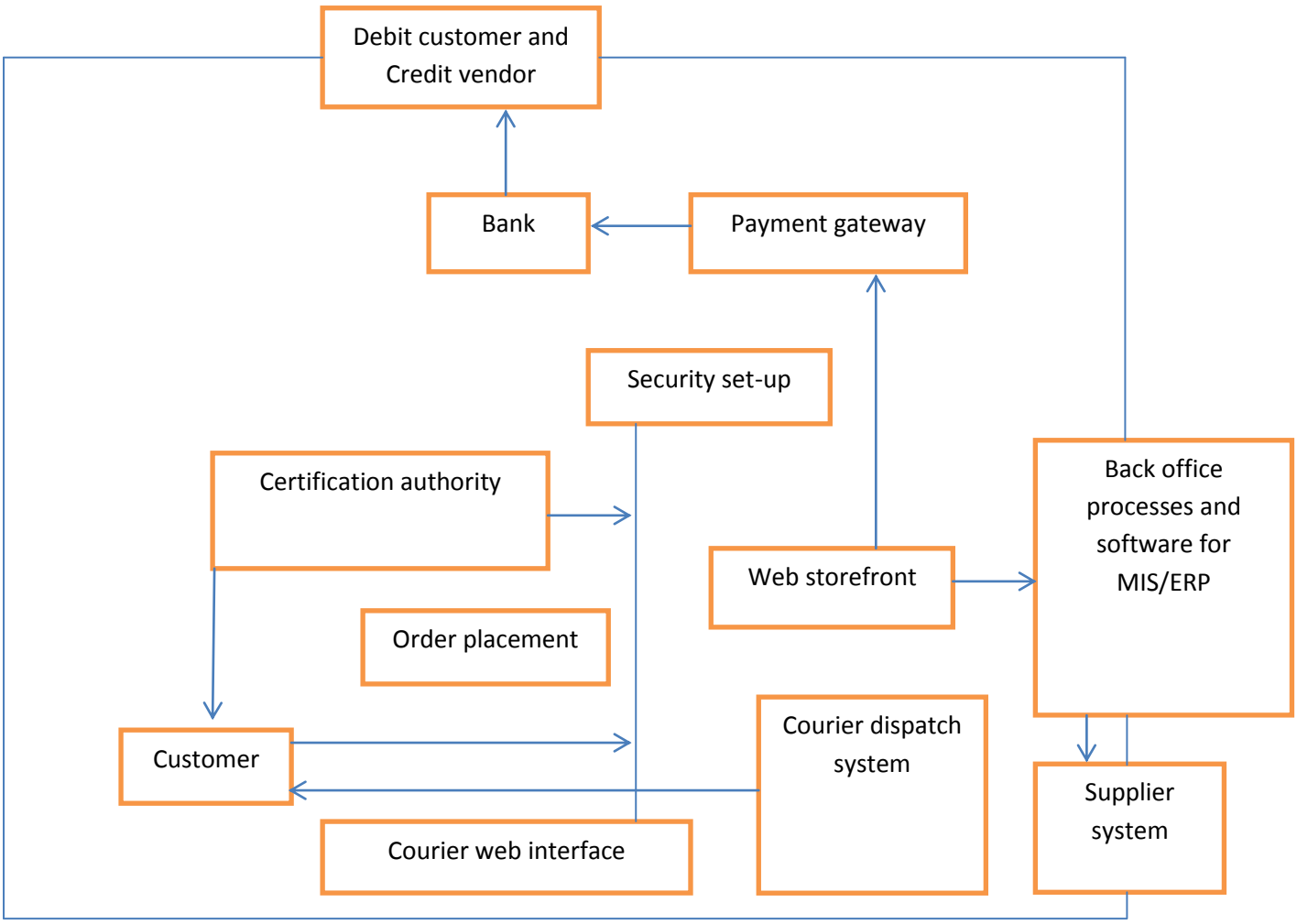


Figure: Risk and E-payment system

Where electronic commerce is concerned, the pace of change is and has been too great for this process to take place. This result in a situation where there is a choice of either applying current legislation or enacting new legislation specifically formulated to meet the challenge of electronic commerce.
2. The very nature of the technology involved means that it is transnational. This leads to problems as to which legal system has jurisdiction over e-commerce transactions.

Protection:
The number of businesses on the Internet has grown, many of these organizations imply maintaining a 'Web presence' by providing information about themselves and their products, and have not yet undertaken Internet-based transactions. This in probably due to concern about the security of transactions and user authorization. Tech concerned with authorization include firewalls, password access, smart cards, and bio fingerprinting. However, in order to provide secure electronic transactions (SET), technologies are used. Encryption technologies, which are supported by the appropriate mechanisms, have the potential to allow global electronic commerce to develop.

Risks from Mistake and Disputes: (Consumer Protection)
Virtually, all e-payment systems need some ability to keep automatic records, for reasons. From a technical standpoint, this is not a problem for electronic systems. debit cards have them, and even the paper-based cheque creates an automatic reo information has been captured electronically, it is easy and inexpensive to keep even cost more to throw it away than to keep it.For example, in many transaction systems, old or blocked accounts are never purged and old transaction histories can forever on magnetic tape.

Managing Information Privacy:
The e-payment system must ensure and maintain privacy. Every time one purchases goods using a credit card, subscribes to a magazine, or accesses a server, that information goes into database. Furthermore, all these records can be linked so that they constitute in effect, single dossier. This dossier would reflect what items were bought, and where and when. This violates the unspoken law of doing business, that privacy of customers should be protected as much as possible.

Credit Risk:
Systemic risk is a major concern in net settlement systems, because a bank's failure i net position could lead to a chain reaction of bank failures. The digital central to develop policies to deal with this possibility. Various alternatives exist, each with i and disadvantages. A digital central bank guarantee on settlement removes the test from the system because banks will more readily assume credit risks from other banks.

E-payment Systems:

The cost and efficiency gains, many hurdles need to be overcome for the spread of art systems. These include several factors, mostly non-technical in nature, that must before any new payment method is made successful. They are as follows:

a. Privacy. A user expects trustworthiness of a secure system; just as the telephone is a safe and a private medium, free of wiretaps and hackers, electronic communication must merit equal trust.

b. Security. A secure system verifies the identity of two-party transactions through "user authentication", and reserves flexibility to restrict information/services through access control. Tomorrow's bank robbers will need no getaway cars- just a computer terminal, the price of a telephone call, and a little ingenuity. Millions of dollars have been embezzled by computer fraud. No systems are yet foolproof, although designers |are concentrating closely on security.

c. Intuitive interfaces. The payment interface must be as easy to use as a telephone.Orally speaking, users value convenience more than anything.

d. Database integration. With home banking, for example, a customer wants with all his accounts. Separate accounts are stored on separate challenge before banks is to tie these databases together and allow customers access to any of them while keeping the data up-to-date and error-free.

e. Brokers. A "network banker"-someone to broker goods and services, settle conflicts and facilitate financial transactions electronically- must be in place.

f. Pricing. One fundamental issue is how to price payment system services. example, should subsidies be used to encourage users to shift from one I payment to another from cash to bank payments, from papers based to e cash. The problem with subsidies is the potential waste of resources, as invested in systems that will not be used.

g. Standards. Without standards, the welding of different payment users into networks and different systems is impossible. Standards enable intense users the ability to buy and receive information, regardless of which their money.

Q.No. 4. *a. What do you mean by Exchange rate? What are different exchange rates? List factors affecting it.* *10*

Ans: **Exchange rate:**

Exchange rates are used to value one currency in relation to another currency. This module focuses on understanding the meaning of exchange rates and how changes in the rates impact prices in general.

Currency exchange is traded on world financial markets – similar to stocks and bonds. Trillions of dollars of currency changes hands every day on the currency markets.

A number of websites show the values in the market, a few of which are shown here:

http://online.wsj.com/mdc/public/page/mdc_currencies.html?mod=mdc_topnav_2_3000
http://www.ft.com/markets/currencies
http://moneycentral.msn.com/investor/market/ExchangeRates.aspx
http://finance.yahoo.com/currency?u
www.x-rates.com
www.oanda.com
www.exchange-rates.org

We can graph the exchange rate over time by placing the U.S. dollar on the vertical axis and the weeks on the horizontal axis.

Spot and forward rates:

Before we go on to consider different types of exchange rate risk we must consider the meaning of the term 'exchange rate'. In practice many exchange rates exist, not only the buy and sell rates between different currencies, but also between the same currencies over different time horizons.

The different rates can be illustrated with an example which considers the exchange rate between sterling and the dollar.

$ spot rate 1.5617-1.5773

One-month $ forward rate 1.5945-1.6136

Three-month $ forward rate 1.6280-1.6523

(The *spot rate* refers to the rate of exchange if buying or selling the currency immediately.The higher of the two spot rates (1.5773) is the buy rate (i.e. the number of dollars you have to give up to receive one pound), while the lower spot rate (1.5617,) is the sell rate (i.e. the number of dollars you receive for giving up one pound). The difference between the two spot rates is called the *spread.*

The rates below the spot rate are called *forward rates* and these allow the fixing of buy and sell rates for settlement and delivery at a specific date in the future. The forward rates are in fact a consensus estimate of the future spot rate, and their accuracy will depend upon how efficient the foreign exchange marketing at forecasting future spot rates and the factors that influence them.

Forward rates can be at either a *premium* or a *discount* to the current spot rate. In our example, the one- and three-month rates are at a discount to the spot rate, indicating that the foreign exchange market is expecting an appreciation in the value of the pound against the dollar (i.e. the market expects that you will receive more dollars for your pound in the future).

Factors affecting exchange rates:
Exchange rate risk is commonly divided into transaction risk, translation risk and economic risk. The meaning of these terms will now be discussed.

Transaction risk-
Transaction risk occurs because, as a consequence of either *importing* raw materials, goods and services, companies expect either to give or receive amounts of foreign currency in the future. The amount of domestic currency either paid or received in these foreign currency transactions may chai\ due to movements in the exchange rate.
For example, suppose that a UK company sells a car to a German customer for DM 30000 and gives three months' credit, with payment to be received in DM, At the current spot rate of DM 2.95 to the pound, the company expects to receive 30000/2.95 = £10169. If the German customer pays at the end of the three-month credit period and in the interim the exchange rate has moved to DM 3.05 to the pound, the UK company will only receive £9836 when it exchanges its deutschmarks into sterling. This is 3.3 per cent less than expected.

Translation risk-
Translation risk is mainly of relevance to companies with overseas operations subsidiaries. As part of the process of producing consolidated accounts, the balance sheet values of the assets and liabilities of overseas subsidiaries, denominated in a foreign currency, will need to be translated into the domestic currency. The foreign currency denominated profit and loss account will also need to be translated and consolidated. Translation risk refers to the possibility that, as a result of the translation of overseas assets, liabilities and profits into the domestic currency, the holding company may experience a loss or a gain due to changes in the exchange rate.

The other factors are:
1. The environmental conditions
2. The political issues
3. The market up-downs
4. The currency issues related with stock exchange

Q.No. 4. *b . What do you mean by Overtrading? What are the ways to tackle the problem of Overtrading?* *10*

Ans: **Overtrading:**

Overtrading, or undercapitalization, occurs if a company is trying to support too large a volume of trade from too small a working capital base, and emphasizes the need to make adequate provision for investment in working capital. It is essentially the result of the supply of funds failing to satisfy the demand for funds within a company. Even if a company is operating at a profit, overtrading can result in a liquidity crisis, with the company being unable to meet its debts as they fall due, because cash has been absorbed by growth in fixed assets, stock and debtors. Overtrading, then, can lead to serious and sometimes fatal problems for a company.

Overtrading can be caused by a rapid increase in turnover, perhaps as a result into successful marketing campaign, if the necessary associated investment in fixed and current assets has not been made. Overtrading can also arise in the early years of trading if a business starts off with insufficient capital. This may be due to a mistaken belief that sufficient capital could be generated from trading profits and ploughed back into the business, when in fact the early years of trading are often difficult ones. Overtrading may also be due to erosion of a company's capital base, perhaps due to the non-replacement of long-term loans following their repayment. There are several appropriate strategies to deal with overtrading, as follows.

Introduction of new capital: This is likely to be an injection of equity finance rather than debt since, with liquidity under pressure due to overtrading, management will be keen to avoid further straining cash flow by increasing interest payments.

Improved working capital management: Overtrading could also be attacked through better control and management of working capital, for example by chasing overdue accounts. Since overtrading is more likely if an aggressive funding policy is being followed, adoption of a matching or more relaxed approach to funding could pay dividends.

Reducing business activity: If necessary, a company could choose to rein back the level of its business activity in order to consolidate its trading position and to allow time for its capital base to build up through retained earnings, though this is considered somewhat drastic.
Indications that a company may be overtrading could include;
• rapid growth in sales over a relatively short time period;

• rapid growth in the amount of current assets, and perhaps fixed assets;

• deteriorating stock turnover and debtor's ratio;

• increasing use of trade credit to finance growth in current assets;

• declining liquidity, indicated perhaps by a falling quick ratio;

• declining profitability, perhaps due to using discounts to increase sales;

Q.No. 5. *a. Explain various ways of valuation of target company and also explain ways of financing of acquisition.* *10*

Ans: **Valuation of a target company:**

There are two broad approaches that can be used when valuing companies. A company value can be calculated according to value of assets of company itself on alternately by reference to future earning or cash flows that are accepted to be obtained through ownership and utilization of it's assets. The later approaches referred as going concern valuation.

1. **Stock market valuation:**
   Straightforward method of valuation calculated by taking no. of ordinary shares of company and multiplying it by their current market price.

2. **Assets valuation:**
   There are several ways of assets valuation. The most straightforward asset valuation is the balance sheet or book value of company's assets.

3. **Realization or Break-up value:**
   This valuation is based on the amount that could be realized when target company's assets were sold on the open market. It can be defined as residual value left after realization of assets, the deduction of liquidation costs and paying off of liabilities.

4. **Replacement value:**
   This method seeks to determine cost of acquiring the separate assets of a target company on an open market basis.

5. **Going concern valuation:**
   This method is appropriate if the intention of Predator Company is for it to continue in business for the foreseeable future with no significant changes in operation. There are many ways for this method to act.

Capitalized earning valuation-

Capitalized earning value= (Annual maintainable expected earnings/ required earning yield)

Price/ Earning ratio valuation-

P/E ratio= (Market value of company/ required earning yield)

Gordon growth model-

Po= Do (1 + g) / (r - g)

Where;

Do= current total dividend payment

g = expected annual growth rate

r = required rate of return for company.

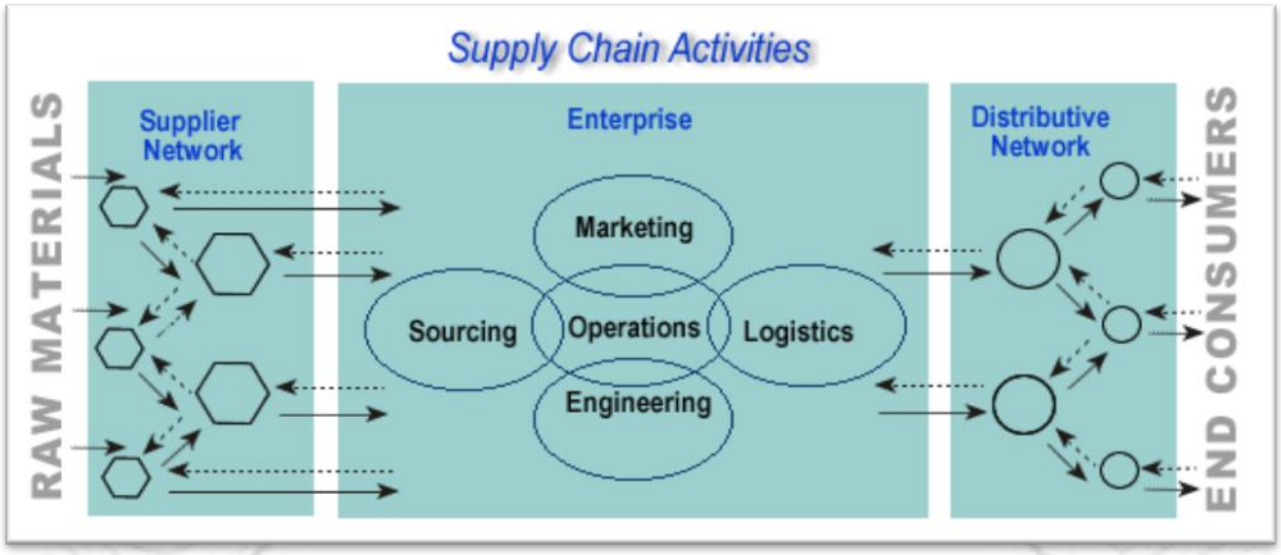
Ways of acquisition of financing:

1. Financial Institutions:
2. Mutual funds and Debts:
3. Venture capital funds:
4. Banks:
5. Alliance partnership corporations:

Q.No. 5. *b. Explain E-supply chain management in detail.* *10*

Ans: **E-Supply Chain Management (SCM):**

It is essentially a business process that links manufacturers, retailers, suppliers, customers in the form of chain to develop & delivers the product.



Objectives of SCM:

The objectives is to obtain benefits by streamlining the movment of manufactured product from the production line to the customer's hand.
According to the Council of Supply Chain Management Professionals (CSCMP), Supply chain management is a generic term that ecompasses the co-ordination of order generation, order taking, distribution of product & service.

The opportunity cost of retained earnings-
Retained earnings, a company liability, belong to shareholders. This means that they are not costless, but have a cost which is equal to the best return that shareholders could obtain on their funds elsewhere in the financial markets. The best alternative return obtainable by shareholders is called the 'opportunity cost'.

The costs associated with external finance-
By using retained earnings, companies can avoid incurring the issue costs associated with raising external finance and will not make commitments to servicing fixed interest debt.

The availability of external sources to the company-
The range of sources of finance available to a company will depend upon its individual circumstances. A company which is not listed on a recognised stock exchange, for example, will find it difficult to raise large amounts of equity finance, while a company which has a large proportion of debt finance and is therefore seen as somewhat risky will find it difficult to raise further bank loans.

The dividend policy of the company-

The dividend policy of a company will have a direct impact on the amount of retained earnings available for investment. Companies which consistently pay out a high proportion of distributable profits as dividends will need to utilise a higher proportion of external finance when funding investment projects.

Major Trends in E-SCM:

TRENDS	CHARACTERISTICS
• Customer Trends	• Speed of service • Self service
• Service/ process trends	▪ Convergence of sales &service ▪ Ease of use ▪ Flexible service delivery ▪ Streamlining the supply chain
• Organizational trends	• Contract manufacturing • Business process outsourcing • Increase process transparency
• Enterprise technology trends	▪ Enterprise application ▪ Multichannel integration ▪ Wireless application

Material Flow:
Supply management
Purchasing inbound logistics
Manufacturing management
Capacity, utility, productivity throughput
Customer demand management
Customer service

Control Decisions and Processes:
Production schedule
Production planning
Demand planning
Information Flow:

Flow of materials and information through a business, from the initial purchasing function to the operation and eventually to the customers, is known as the supply chain. The concept of SCM is a holistic view of coordinating functions that transfer

data and resources from the suppliers to consumers in the finished form to make the process easy and cost effective.

E-commerce Enabled SCM Solution:

Electronic procurement-

Extranet-based integration with suppliers Advanced decision system for material sourcing and purchasing

Production optimization-

Distribution, sales & service coordination-

ERP-

Performance enhancement using data warehousing decision support and web technology

Collaborative demand planning Internet-enabled distribution optimization Web-based customer service.

Q.No. 6. *a. Explain the important aspects of IT Act 2000.* *10*

Ans:

The Information Technology Act, 2000:

The Parliament of India passed its first **Cyber law** on the 17th of October 2000, the **Information** Technology (IT) Act, 2000 which provides the legal infrastructure for e-commerce in India. The purpose of the IT Act, 2000, as mentioned in the language of the Act is:

to provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as "electronic commerce", which involve the use of alternatives to paper-based methods of communication and storage of information, to facilitate electronic filing of documents with the Government agencies and further to amend the Indian Penal Code, the Indian Evidence Act, 1872, the Banker's Book Evidence Act, 1891 and the

Reserve Bank of India Act, 1934, and for matters connected therewith or incidental thereto.

The General Assembly of the United Nations, by its resolution A/RES/5I/162 dated 30th January 1997, adopted the Model Law on Electronic Commerce adopted by the United Nations Commission on International Trade Law. The Indian Information Technology Act, 2000, accordingly draws upon the Model Law.

The implementation of this Act has kick started a new era of e-governance and will have a lot of impact on the way people do business in India and will also open up new opportunities for e-business, as people would be less apprehensive about the legal hassles and Therefore, it is essential for us to understand what the IT Act, 2000 offers and what its various perspectives are.

Highlights of the IT Act, 2000:

For a basic understanding of the IT Act by the layman, the salient features of the Act i its relevant portions on e-business are enumerated below:

• Electronic contracts are legally valid—EDI accorded legal recognition.

• Legal recognition accorded to digital signatures.

• Digital signature to be effected by use of asymmetric crypto system and hash function]

• Security procedure for electronic records and digital signature.

• Appointment of Certifying Authorities (CAs) and the Controller of Certifying Authorities (CCA) including recognition of foreign Certifying Authorities.

• Controller to be appointed, who will act as repository of all digital signature certificates.

• Certifying Authorities require to get licence to issue digital signature certificates.

• Various types of computer crimes defined and stringent penalties provided under Act.

• Appointment of Adjudicating Officer for holding inquiries under the Act.

• Establishment of Cyber Appellate Tribunal under the Act.

• Appeal from order of Adjudicating Officer to Cyber Appellate Tribunal and not the any Civil Court.

• Appeal from order of Cyber Appellate Tribunal to High Court.

• Act to apply for offences or contraventions committed outside India.

• Network Service providers not to be liable in certain cases.

• Power to Police officers and other officers to enter into any public place and se and arrest without warrant.

• Constitution of Cyber Regulations Advisory Committee to advise the Central Governn and Controller.

• Amendments effected in:

(a) Indian Penal Code

(b) Indian Evidence Act

(c) Banker's Books Evidence Act

(d) Reserve Bank of India Act

Important Concepts Introduced in the IT Act, 2000:

Some of the important concepts introduced in the IT Act, 2000 are:

• Electronic record

• Secure electronic record

• Digital signature

• Secure digital signature

• Certifying authority

• Digital signature certificate

The concept of electronic record, as envisaged by the Act has already been described. A secure electronic record has been defined in the Act as follows:

Where any security procedure has been applied to an electronic record at a specific point of time, then such record shall be deemed to be a secure electronic record from such point of time to the time of verification.

The IT Act, 2000 prescribes that electronic records are to be authenticated by means of affixing a digital signature. This digital signature must be effected by the use of an asymmetric crypto system and hash function. In contrast, the European Electronic Signature Standardizations Initiative (EESSI) is technology neutral in its prescription of how an electronic signature may be effected.

This point needs a little elaboration. Until fairly recently (about 1997) it was believed that the use of asymmetric crypto systems would be the foundation for all electronic authentication. However, there is an increasing awareness that other technologies, such as *biometrics,* also offer the promise of electronic authentication. Consequently, there is greater interest in technology-neutral legislation. This type of technology-neutral specification tends to be called *electronic signature* as opposed to *digital signature,* which is just one type of electronic signature.

The technical requirements for effecting digital signatures *by* the use of an asymmetric crypto system with hash function are a private key to effect a digital signature and a public key to verify such a signature. The private key must be kept secret, as its name implies ' public key must be made available to any individual who needs to verify a signature created with the private key. The Act stipulates that the association between a subscriber's name and his public key should be made available by a duly licensed certifying authority in the form of a *digital signature certificate.*

A certifying authority provides a subscriber for a fee, with a digital signature certificate and a private key. The private key is known only to the subscriber. The certifying authority is obliged to:

1. Make use of hardware, software, and procedures that are secure from intrusion misuse.

2. Provide a reasonable level of reliability in its services which are best suited to ' performance of intended functions.

3. Adhere to security procedures to ensure that the secrecy and privacy of the digitdj signatures are assured.

4. Observe such other standards as may be specified by regulations.

The digital signature certificate of any subscriber is used by anyone who wishes' verify a digital signature purported to be affixed by that subscriber. Thus the basic role i a certifying authority is to establish trust in the name-public key association that is contain in the digital signature certificate.

Q.No. 6. *b. Explain term and risk structure of interest rate.* *10*

Ans:

Bond Ratings -

- Moody's and Standard and Poor's

Ratings Groups

- Investment Grade
- Non-Investment – Speculative Grade
- Highly Speculative

Term Structure of Interest Rates:

The relationship among bonds with the same risk characteristics but different maturities is called

the term structure of interest rates.

A plot of the term structure, with the yield to maturity on the vertical axis and the time to

maturity on the horizontal axis, is called the yield curve.

Total return from 2 year bonds over 2 years-

$$(1+i_{2y})(1+i_{2y})$$

Return from one year bond and then another one year bond-

$$(1+i_{1y})(1+i^{e}_{1y})$$

If one and two year bonds are perfect substitutes, then:

$$(1+i_{2y})(1+i_{2y}) = (1+i_{1y})(1+^{e}_{1y}) \qquad i_{2y} = \frac{i_{1y} + i^{2}_{1y}}{2}$$

$$i_{nt} = \frac{i_{1t} + i^{e}_{1t+1} + i^{e}_{1t+2} + ... + i^{e}_{1t+n-1}}{n}$$

Liquidity Premium Theory:

$$i_{nt} = rp_n + \frac{i_{1t} + i^{e}_{1t+1} + i^{e}_{1t+2} + ... + i^{e}_{1t+n-1}}{n}$$

Q.No. 7. *Write short notes on:* *20*
a. Public issue and private placement

Ans: **Public Issue:**

For most of companies their IPO is seldom their last public issue.These issues are likely to be public issues offered to investors at large or rights issues offered to existing shareholders.

The procedure for public issue a listed company is similar to that of an IPO.Hence all the steps involve in an IPO are applicable to a public issue by a listed company. However a public issue by a listed company is subject to fewer regulations when compared to an IPO.
This is evident from following;

A public issue by company which has been listed on stock exchange for at least three years and has a track record of dividend payment for at least three immediate preceding years does not required the promoters contribution, provided the relevant information disclosed in offer document.

There are no pricing norms for public issue by listed company.

The Right issue is an important part of public issue.

Private placement:

Private placement and preferential allotment involves sale of securities to limited no. of sophisticated investors such as financial institutions, mutual funds, venture capital funds, banks and so on.

Private placement refers to sale equity or equity related instruments of unlisted company of sale of debentures of listed or utilized company.

Private placements in India are mostly of equity or equity related instruments of unlisted company of sale of debentures of listed or utilized company.

 # Private placement of Equity:

An unlisted company requiring infusion of equity funds but not ready to make IPO may place privately its equity or equity related instruments with one or more sophisticated investors.

Typically mutual funds, venture capital funds and alliance partners participate in Private placement of Equity.

 # Private placement of Debt:

This placement particularly listed companies has become very popular in India in recent years. The principle buyers of debt securities are financial institutions, mutual funds, Army Group Insurance, Navy Group Insurance, Air Force Group Insurance and so on.

Appeal of private placement:

1. **Accessibility:**

   All types companies have access for private placement. It can accommodate smaller size company also.

1. **Flexibility:**

   There is greater flexibility in working out with terms of issues.

2. **Speed:**

   The time required is usually 6 months or more because of several formalities to be gone through.

3. **Lower Issue Cost:**

   The public issue entails quite high costs but against this the private placement cost is substantially less.

Q.No. 7. *b. Enabling Technologies of E-commerce.* *10*

Ans: **Enabling Technologies of the World Wide Web for E-Commerce:**

The World Wide Web (abbreviated Web, WWW, or W3) is a system of Internet servers that supports hypertext to access several Internet protocols on a single interface. Almost every protocol type available on the Internet is accessible on the Web. This includes e-mail, File Transfer Protocol (FTP), Gopher, Telnet, and the like. In addition to these, the World Wide Web has its own protocol, the HyperText Transfer Protocol (HTTP).

The World Wide Web provides a single interface for accessing all these protocols. This creates a convenient and a user-friendly environment. It is no longer necessary to be conversant with these protocols within separate, command level environments.

The operation of the Web relies primarily on hypertext as its means of information retrieval. HyperText is a document containing words that connect to other documents. These words are called *links,* and open on a single click. A single hypertext document

can contain links to many documents. In the context of the Web, words or graphics may serve as links to other documents, images, video and sound. Links may or may not follow a logical path and it depends on how the source document is programmed. On the whole, the WWW contains a complex virtual web of connections among a vast number of documents, graphics, videos, and sounds.

The Web provides a vast array of experiences including multimedia presentations, real-time collaborations, interactive pages, radio and television broadcasts, and the automatic " push "of information to a client computer. New programming languages such Java and JavaScript are expanding these capabilities of the Web.

Internet Client-Server Applications:

The users of the Internet interact through one of the several client-server applications, the name suggests, in a client-server application there are two major classes of software- the client software, which usually exists on an end-user's desktop and provides navigation and display. The other software is the server software, which usually exists on a workstation or a server-class machine and provides back-end data access services, where the data be something simple like a file or complex like a relational database. The most widely used client-server applications are listed in Table 1.1.

TABLE 1.1:

CLIENT-SERVER APPLICATIONS:

Application	Protocol	Purpose
World Wide Web resources.	(HTTP)	Offers access to hypertext documents and internet
E-mail attachments	(SMTP)	Allows the transmission of text messages, binary
	(POP3)	
	(MIME)	
File Transfer across the net.	(FTP)	Enables files to be uploaded and downloaded
Chat time.	(IRC)	Provides a way for users to talk to another in real-
Use Net Newsgroups	(NNTP)	Discussions forums where users post messages.

E-mail allows computer users to exchange messages worldwide. Each user of e-mail has a mailbox address or user account identity, with which all main transactions are done. Messages sent via e-mail reach their destination within a matter of seconds. A powerful e-mail is the option to send electronic files to a person's e-mail address. Non-ASCII files known as binary files, may be attached to e-mail messages. For example, a document created in Microsoft Word can be attached to an e-mail message and retrieved by the recipient in any e-mail program such as Pine, Netscape messenger or Outlook Express.

Telnet:

Telnet is a program that allows you to log into computers on the Internet and use online databases, library catalogs, chat services and more. To Telnet to a computer, you must know its address. This can consist of words *(www.yahoo.com)* or numbers (204.71.200.67).

File Transfer Protocol (FTP):

This is both a program and a method used to transfer files between computers on the Internet. Anonymous FTP is an option that allows users to transfer files from thousands of host computers on the Internet to their personal computer account. File transfer is quite rapid. FTP sites contain books, articles, software, games, images, sounds, multimedia, course work, data sets, and more. FTP transfers can be performed on the World Wide Web even without a special software.

FTP Search, located at *http://ftpsearch. lycos.com/.* This option is convenient because you do not need to know FTP program commands.

Chat on the Web:

Chat programs are now common on the Web. They are sometimes included as a feature of a website, where users can log into the "chat room" to exchange comments and information about the topics addressed on the site. Chat may take other, more wide-ranging forms.

IRC:

IRC is the Internet Relay Chat service in which participants around the world can ' each other in real-time on hundreds of channels. These channels are usually particular topic.

ICQ:

As the name implies, ICQ or 'I Seek You' is simply a smart way of getting in touch the people. This small program takes up the complicated work of finding friends, colleagues, people with similar interests across the globe, people who could be

communicating by e-a chat, SMS, phone or pager, and makes it as straightforward as calling across a room starting a friendly conversation.

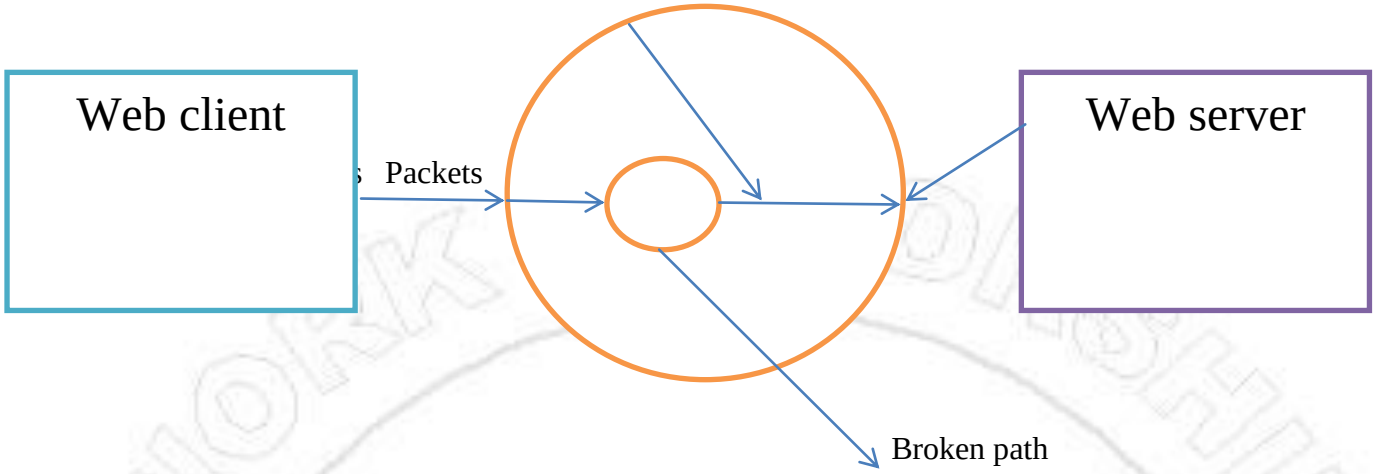


Figure: A packet switching network with a broken path.

In packet-switched networks, breaking one path does not prevent the data from reaching destination. The packet will simply find a different path. Each packet must contain its destination address. As the packet travels from one computer to another, each computer s the packet's address and routes the packet to its next intermediate hop or directly destination. The Internet is a packet-switched network. Think of a packet in a packet-network as a traveller flying from New Delhi to Mumbai.

The main technologies includes following;
1. Digital signature
2. Certifying authority
3. Encryption
4. Digital signature certificate