



**Qn. 1. (a)** Describe briefly the following terms :

[ 5 x 1 = 5 marks ]

- (i) RISC
- (ii) SCSI
- (iii) WiFi
- (iv) Linked List
- (v) Metadata.

**(b)** Explain each of the following :

[ 5 x 1 = 5 marks ]

- (i) Mirror Log
- (ii) Open Source Software
- (iii) Fire wall
- (iv) Intranet
- (v) Multitasking.

**Ans. 1. (a)**

- (i) **RISC** – Reduced instruction set computing is a CPU design strategy based on the insight that simplified instructions can provide higher performance if this simplicity enables much faster execution of each instruction.
- (ii) **SCSI** – SCSI stands for small computer system interface which is a device interface used to solve the problem of a finite and possibly insufficient number of expansion slots.
- (iii) **Wifi** - Wifi is a brand originally licensed by the wi-fi alliance to describe the underlying technology of wireless local area networks based on the IEEE 802.11 specifications. Wifi stands for wireless fidelity.
- (iv) **Linked List** – Linked list is a group of data records arranged in an order which is based on embedded pointers. An embedded pointer is a special data field that links one record to another by referring to the other record.
- (v) **Metadata** – Metadata or " data about data " is used to inform operators and users of the data warehouse about its status and the information held within the data warehouse. Examples of data warehouse metadata include the most recent data load date, the business meaning of a data item and the number of users logged in currently.

**Ans. 1. (b)**

- (i) **Mirror Log** – Mirror log is an optional file having extension. mlg, which is a copy of a transaction log and provides against the loss of data in the event the transaction log becomes unusable.
- (ii) **Open source software** – open source software is computer software that is available in source code which the source code and certain other rights normally reserved for copyright holders are provided under a software license that permits users to study, change and improve the software.
- (iii) **Firewall** – Firewall is one of the most popular techniques of network security. Firewall provides logical security to organization data and network. Firewall is computerized electronic system(Firewall are mainly specialized software) installed between organization private network and public network to protect organization private network from unauthorized access. Firewall is control mainly for invasive type of subversive threats.
- (iv) **Intranet** – Intranet is a private network available to organization employee from any where using internet. The intranet is a type of information system that connects people, department and offices which are widely dispersed with in an organization. Intranet is network of an organization which uses internet technology for communication like web browser, web server etc.
- (v) **Multitasking** – Multitasking refers to ability of system to execute two or more task simultaneously for single user. Multitasking operating system allows a user to execute or switch between many task simultaneously.

**Qn 2.** Answer the following :

**(a)** Explain the value added services that a Data Centre provides.

[ 5 marks ]

**(b)** Explain different core phases that are required in developing a backup and recovery strategy. [ 5 marks ]

**Ans. 2. (a)** Value added services that a data center provides are :-

- (i) **Database Monitoring:** Help to provide fast and reliable data access services round the clock by continuously monitoring the working and performance of data managed by data centers
- (ii) **Web Monitoring:** Provide web hosting (means web site uploading as done by CA institute in some data center for their web site) and also the monitoring of web site for round the clock for reliable and efficient access of site to their users
- (iii) **Backup and Restore:** Help to provide automatic backup of managed data and also automatically restore the data destroyed accidentally or intentionally by using this backup.



- (iv) Intrusion Detection System (IDS): ID stands for Intrusion Detection; it is an art of detecting inappropriate, incorrect and unauthorized activity. This is primarily a security system which help to provide data access to authorized persons only and protect the data from malicious activities.
- (v) Storage on Demand: It provide the required storage capacity to organization to maintain their data volume in online (without lag) manner, which help to provide reliable and robust data management services.

**Ans. 2. (b)** The different core phases required for backup and recovery strategy :-

- (i) Understand the need for backup and recovery:- Is backup and recovery necessary for survival of your business? Like we all can imagine banks can not survive without backup and recovery of database
- (ii) Management should commits time and resources
- (iii) Develop procedure for backup and recovery, estimate time, develop documents, perform health checks. Deploy the backup and recovery procedure and than monitor its working
- (iv) Beware of external factors that affect recovery: like hardware and software i.e. these should be in proper working conditions
- (v) Protect database backup by performing health checks.

**Qn 3. (a)** Discuss the various attributes of Local Area Network (LAN). [ 5 marks ]  
**(b)** What is Integrated Services Digital Network (ISDN) ? Write its advantages. [ 5 marks ]

**Ans. 3. (a)** Various attributes of LAN are as follows:-

- (i) Inexpensive way of data communication
- (ii) Easy to setup network.
- (iii) High data transmission rate.
- (iv) Network data transmission speed is independent of attached devices.
- (v) Easy physical connection between devices.
- (vi) Easy to control and maintain.

**Ans. 3. (b)** Integrated Services Digital Network (ISDN) is a system of digital phone connection to allow simultaneous voice and data transmission across the world. ISDN is a set of Protocols for establishing and breaking circuit switched connections, and for advance call features for the user.

**Advantages of ISDN are:-**

**(i) Multiple Channel Operation:**

ISDN allows multiple digital channels to be operated simultaneously through the same regular phone cable meant for analog signals. However, that is possible if the telephone company's switches can support digital connections.

**(ii) Combination of Different Digital Data Sources:**

With ISDN it is possible to combine many different digital data sources and have the information routed to the proper destination. In a digital line it is easier to keep noise and interference out even after combining these signals.

**(iii) Communication through Separate Connections:**

The phone company sends a ring voltage signal to ring the bell which is an In Band signal. However, ISDN sends a digital packet on a separate channel which is an Out Band signal without disturbing the established connections, without taking any bandwidth from data channels and setting up call much faster.

**(iv) Network Termination:**

Generally the telephone company provides the BRI customers with a U interface which is nothing but a single pair of twisted wire from the phone switch just like the same interface provided for the telephone lines.

**Qn 4.** The Income-tax for the employees of an organization is calculated on the basis of their Gross Income and the Investments made by them, under Section 80CCC. The taxable income is calculated according to the following rules : [ 10 marks ]

Taxable Income = Gross Income - Investments provided investments are less than 1 lac. Otherwise

Taxable Income = Gross Income - 1,00,000

Following rules are applied to calculate the Income-tax, on the Taxable Income :

Taxable Income	Income-tax
(i) 0-1,60,000	Nil
(ii) 1,60,001-3,00,000	10%, on the excess of 1,60,000
(iii) 3,00,001-5,00,000	14,000 + 20% on the excess of 3,00,000
(iv) 5,00,001 and above	54,000 + 30% on the excess of 5,00,000

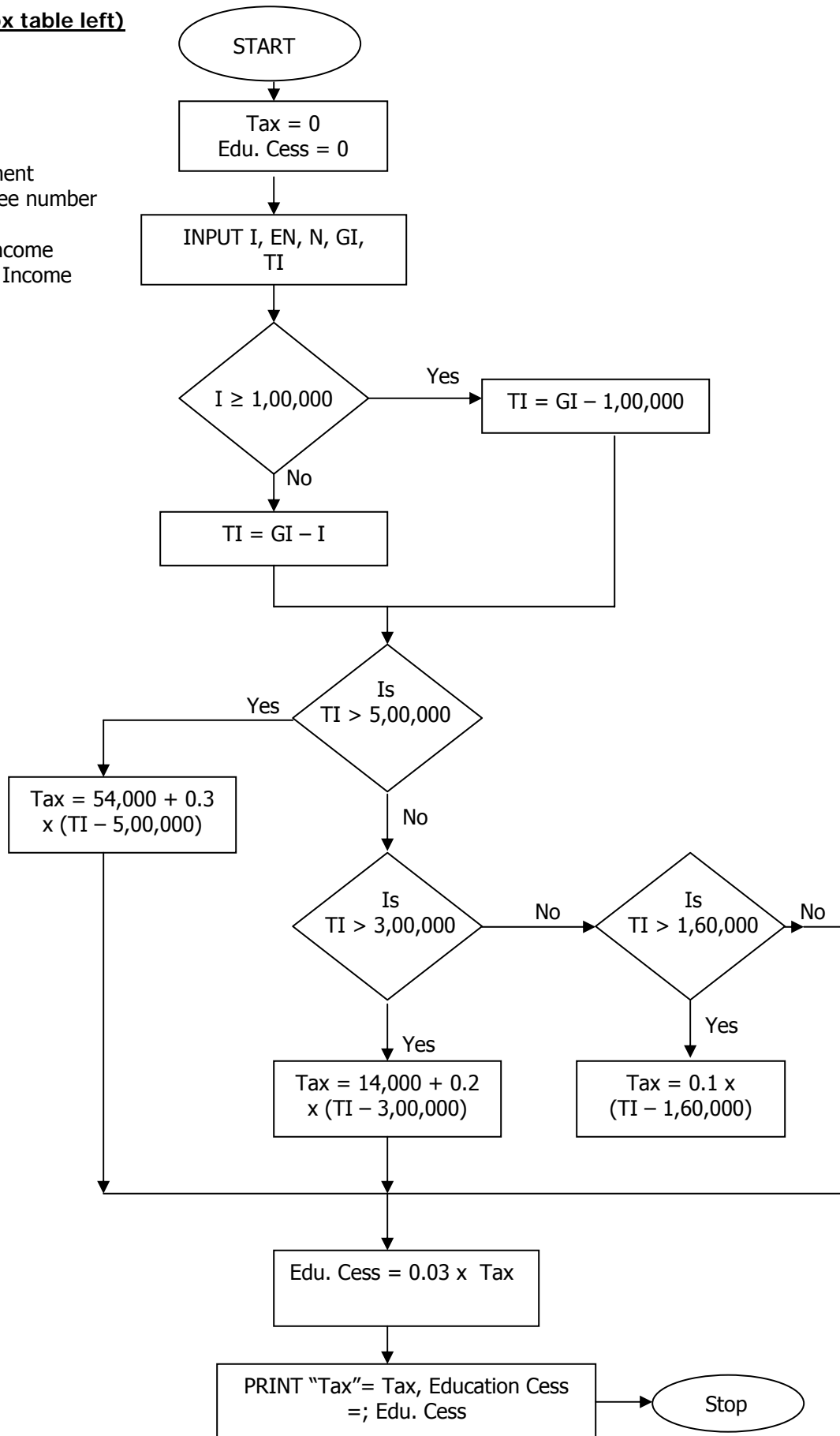
Also an educational cess of 3% of Income-tax is levied on all the employees, irrespective of the income.

Employee number, Name, Gross Income, Investment amount is given as input. Draw a flow chart to calculate the Income-tax payable by each employee.



Ans. 4 (one text box table left)

Here, I = Investment  
EN = Employee number  
N = Name  
GI = Gross Income  
TI = Taxable Income





**Qn 5.** Write short notes on the following :

- (a) Stages of Data Mining [ 5 marks ]
- (b) Bluetooth Technology. [ 5 marks ]

**Ans. 5. (a)** Following are the stages of data mining:-

- (i) Selection – In this target is selected from large volume of data.
- (ii) Preprocessing – In the target data is pre-processed for required data fields or information. The non-required data fields are removed from the target data.
- (iii) Transformation – In this stage processed data is transformed in a form such that it can be easily navigated.
- (iv) Data Mining – This is the most important stage, in this data is converted into certain patterns for extraction of knowledge out of it.
- (v) Interpretation and Evaluation – In this stage the data patterns are converted into useful information known as knowledge based information, which helps in efficient and effective decision making process.

**Ans.5. (b)** - Bluetooth is a latest technology which enabled mobile phones, computers, PDA etc to communicate with each other in short range or distance with wireless facility i.e. without connecting with each other using wires or cables. Bluetooth enable users of mobile phone to coordinate data exchange and transfer by enabling to send, receive and print information using phone, computers and printers etc. Bluetooth require a low cost Trans-receiver chip in each device, this chip enabled to transmit and receive the data in certain predefined frequency band of 2.45 GHz. In addition to data the Bluetooth also enable to use voice channels, Bluetooth connection can be point to point and multipoint and normally works in the short range. This technology got this name in honor of Herald Bluetooth King of Denmark in the 10<sup>th</sup> century.

### Section B

**Qn 6.** State with reasons which of the following statements is correct or incorrect : [ 3 x 2 = 6 ]

- (a) Globalisation means different things to different people.
- (b) Production strategy implements, supports and drives higher strategies.
- (c) Benchmarking and Business Process Reengineering are one and the same.

**Ans. 6 (a) Correct,** A company is said to be global when the company consists heavily with several manufacturing locations around the world and offers product in several diversified industries and able to compete in domestic markets with foreign markets. So it means different things to different people.

**(b) Incorrect,** Product strategy is concerned with the capacity, location, layout, product and service designs etc. Strategies related to production system are very important as they deal with vital issues effecting the capacity of the organization to achieve its objectives.

**(c) Incorrect,** Benchmarking is a process of determining who is the best, who sets the standard and what that standard is but the business process reengineering is an approach which seeks improvement in operating effectively through the re-designing of core business process and other supporting system.

**Qn 7.** Briefly answer the following : [ 3 x 2 = 6 ]

- (a) Need for Turnaround Strategy
- (b) Grand Strategy Alternative during Recession
- (c) Shared Vision' and 'Vision Shared'.

**Ans. 7 (a)** There are certain conditions or indicators which point out that a turnaround is needed : -

- (i) Persistent negative cash flow
- (ii) Negative profits
- (iii) Declining market share
- (iv) Deterioration in physical facilities
- (v) Over manning, high turnover of employers, and low morale
- (vi) Uncompetitive products or services
- (vii) Mismanagement.

**Ans. 7 (b)** The grand strategy alternative during recession is combination strategy so that the problem of capital resolved by combining the capital of two or more firms. By adopting combination strategy a firm can survive the period of recession and also successfully stable the business in the time of recession. So during recession a firm will adopt combination strategy.



**Ans. 7 (c). Shared Vision :** A shared vision is much more than a list of goals. It needs to be something that inspires people and gets them to pull together for cooperative action. People really get energized by what their group is trying to accomplish. They pull together to accomplish something worthwhile. Ideally, people can see a personal role in bringing the vision to life. This is the "shared" aspect of a shared vision. The following cultural qualities are associated with a shared vision at the workplace.

**Qn 8. (i)** What tips can you offer to write a 'right' Mission Statement ? [ 2 x 4 = 8 marks ]

**(ii)** An industry comprises of only two firms—Soorya Ltd. and Chandra Ltd. From the following information relating to Soorya Ltd., prepare BCG Matrix :

Product	Revenues (in Rs.)	Percent Revenues	Profits (in Rs.)	Percent Profits	Percentage Market Share	Percentage Industry Growth rate
A	6 crore	48	120 lakh	48	80	+ 15
B	4 crore	32	50 lakh	20	40	+ 10
C	2 crore	16	75 lakh	30	60	- 20
D	50 lakh	4	5 lakh	2	5	- 10
Total	12.5 crore	100	250 lakh	100		

**Ans. 8 (i)** Tips for a 'right' mission statement are :-

- It should be based on existing business capabilities "Who we are and what we do?"
- It should follow the long term strategy principles
- Profit making should not be the only mission of organization
- It should be logical extension of business existing capabilities
- It should clearly and precisely present the future orientation of business
- It should includes achievable missions
- It should be stated in a form that it becomes the motivating force to every member of organization
- Mission statement once formed shall be communicated to every member of organizations
- It should include interest of customers and society

**Ans. 8 (ii)** The BCG growth – share matrix displays the various business units on a graph of the market growth rate vs. market share relative to competitors. Resources are allotted to business units according to where they are situated on the grid as follows :-

**Cash Cow** : - A business unit that has a large market share in a mature, slow growing industry. Here in the given case product 'c' has a large market share as 60 and slow growth rate as 20.

**Stars** : A business unit that has a large market share in a fast growing industry. In the given case product 'A' has large market share as 80 and high growth rate as +15.

**Question mark** : A business unit that has a small market share in a high growth market. In the given case product 'B' has small market share as 40 and high growth rate as +10.

**Dog** : A business unit that has a small market share in a mature industry. Here in the above case product 'D' has a low growth rate as '- 10' and as well as low market share as '5'.

Market growth rate (cash usage)	Relative market share (cash generation)	
	High	Low
High	<u>Stars</u> Product 'A'	<u>Question Marks</u> Product 'B'
Low	Product 'C' Cash Cow	Product 'D' Dogs



- Qn 9.** Michael E. Porter has suggested three generic strategies. Briefly explain them. What is the basic objective to follow a generic strategy ? In what situations can the three strategies be used ? Identify the type of strategy used in the following examples : [ 3 + 1 + 3 + 3 = 10 marks ]
- (a) Dell Computer has decided to rely exclusively on direct marketing.
  - (b) "Our basic strategy was to charge a price so low that microcomputer makers couldn't do the software internally for that cheaply."
  - (c) 'NDTV, a TV Channel has identified a profitable audience niche in the electronic media. It has further exploited that niche through the addition of new channels like 'NDTV Profit' and 'Image'.

**Ans. 9** The three strategies proposed by Micheal Porter are : -

**Cost Leadership Strategies:**

A primary reason for using forward, backward, and horizontal integration strategies is to gain cost leadership benefits. But cost leadership generally must be pursued in conjunction with differentiation. Large numbers of cost elements affect the relative attractiveness of generic strategies, including economies or diseconomies of scale achieved, learning and experience curve effects, the percentage of capacity utilization achieved, and linkages with suppliers and distributors.

**Differentiation Strategies**

Differentiation strategies include offering products with different features than competitors. Differentiation does not guarantee competitive advantage, especially if standard products sufficiently meet customer needs or if rapid imitation by competitors is possible.

A differentiation strategy should be pursued only after a careful study of buyers' needs and preferences to determine the feasibility of incorporating one or more differentiating features into a unique product that features the desired attributes. A successful differentiation strategy allows a firm to charge a higher price for its product and to gain customer loyalty because consumers may become strongly attached to the differentiation features. Special features that differentiate one's product can include superior service, spare parts availability, engineering design, product performance, useful life, gas mileage, or ease of use.

**Focus Strategies**

An organization using a focus strategy may concentrate on a particular group of customers, geographic markets, or on particular product-line segments in order to serve a well-defined but narrow market better than competitors who serve a broader market.

Focus strategies are most effective when consumers have different preferences or requirements and when competitors are not attempting to specialize in the same target segment. Risks of pursuing a focus strategy include the possibility that numerous competitors will recognize the successful focus strategy and copy it.

The basic objective of generic strategy is to achieve a lasting position in its environment.

The situations for the generic strategy are competitive scope and competitive advantage under the situation of broad target, narrow target low-cost product/services and differentiated products / services.

Type of strategy used in the following examples are : -

- (a) Dell Computer has decided to rely exclusively on direct marketing → Focus Strategy.
- (b) "Our basic strategy was to charge a price so low that microcomputer makers couldn't do the software internally for that cheaply." → Cost leadership strategy
- (c) 'NDTV, a TV Channel has identified a profitable audience niche in the electronic media. It has further exploited that niche through the addition of new channels like 'NDTV Profit' and 'Image'. → Differentiation Strategy.

**Qn 10.** Read the following case and answer the questions given at the end :

Subhiksha (prosperity in Sanskrit) began with a single grocery store at Chennai in 1997. Subhiksha stores increased from 50 in 2000 to 140 by 2002-03 (spread across 30 towns in Tamilnadu) to 670 by 2006-07 to 1650 by September, 2008. Its early success was due to its business model based upon no-frills/deep discount and high level of neighbourhood focus. Its decision in 2004 to go national from a regional player at a rapid pace proved wrong. With the growing ambition to go national, focus shifted from value to customers to creating valuation for self. The company had recruited all the employees to foray into consumer durables also. Its revenue increased from Rs. 278 crore from 140 stores in 2005 to Rs. 2305 crore in 2008 with a capital base of Rs.32 crore. Subhiksha's profit after tax for 2007-08 was Rs. 41 crore. It had invested heavily, largely using debt, and paybacks took longer than expected. Repayment of debt had no relationship to cash flow. In the end the company had liabilities of Rs.900 crore.

Around January, 2009, the company had started to shut down stores pan-India and in February, the top management quit the firm, not just because it defaulted on rentals of its outlets and salaries since October, 2008. Today all the stores are closed. Major suppliers had stopped supplies after it defaulted on payments. It asked its





employees to take home groceries; and go on leave without pay. Many employees did not get their salaries. Initially the company was confident to restructure and remain in business.

Indian retail industry, comprises of 12 million mom-and-pop stores and kirana stores (many of whom have also started innovating) and unknown number of hawkers in the unorganized sector working on small-sized stores and with low or no rentals and salaries and the organized retailers (market share not more than 5%).

The emergence of a large young population and a growing middle class with strong disposable incomes and credit card culture are the drivers of the organized retail, a mix of two types ones going in for huge expansion announcements and others following "slow and steady wins the race strategy". The industry operates not on a very hefty margin. The yearly top-line growth is likely to remain around 10-15% as against forecasted 35% this year. Compared with players like Pantaloon, Reliance, More, RPG and even Nilgiri's (which has private equity funding), Subhiksha has no large group's backing (except Shri Azim Premji having 10% stake). The strategy was to raise more debt and keep equity low. During 2006, Subhiksha had a good chance to make an initial IPO or raise private equity money, but it was in quest of creating higher valuations. Suddenly retail was no longer so hot and the capital tap had gone dry. Due to inability to raise more debt, working capital was diverted to expand. Many of the organized retailers have survived the downturn through transformation in their strategies and tactics. However, one thing is certain that footfalls have declined for the organized retail.

Debt-ridden retailer Subhiksha Trading Services Ltd. has begun its second innings in February, 2010, with the launch of its first cash-and-carry store (the board outside the outlet reads Subhiksha Maligai Arisi Mandi) in Thiruvanimiyur in Chennai — at its first ever retail outlet). "Subhiksha's model will be different this time around and will not directly engage with customers," said an industry source.

#### Questions :

- "To understand the nature of competition certain questions need to be answered." What those questions are ?
- Who were the competitors of Subhiksha ? Do you think they were better equipped than it ?
- What, where and how the business strategy of Subhiksha might have gone wrong ?
- If you were the strategy consultant to the Organised Retailers Association of India, what will you advise to control the cost and convert the threat of dropping footfalls and declining sales into an opportunity?
- How is a Cash-and-carry store different from a Retail store ? Name any other 2 such Cash-and-carry store in India.

#### Ans. 10 Case Study : -

- The key factors by their very nature are so important that all firms in the industry must pay close attention to them. Then certain question which need to be answered are
  - on what basis do customers choose between the competing brands of sellers? What product attributes are crucial?
  - What resources and competitive capabilities does a seller need to have to be competitively successful?
  - What does it take for sellers to achieve a sustainable competitive advantage?
- After a fresh restart after its closure once the competitor player of suviksha was pantaloons, Reliance, More, RPG and even Nilgiri. The strategy of other's were completely opposite as subhiksha. The strategy was to focused on customers and private equity funding and subhiksha mostly depends on debt which involves cash outflow.
- According to the case study and as per my opinion the decision to all of a sudden go international and that it had invested heavily, largely using debt and payback took longer than expected. By the end of the co. winding up of Rs.900 crores.
- Being a strategy consultant to the organised retailer association of India. As retail is no longer so hot and the capital base eg. investment in retail shop has gone down because of this the debt couldn't be raised. As the basic aim and primary objective is consumer sovereignty but since it shift towards self valuation their was a downfall in retail organization. The co. should make an environment analysis strategies get time to anticipate opportunities and to plan to take optional response to these opportunities. To develop strategies and treat threat to the ferin's advantage the firm should focused on private equity funding. The firm can give discount to the customers so that the customers attract towards the firm. Subshika must focused on customers and for controlling cost focused towards private equity funding so that cash outflow minimises in respect of present situation.
- cash and carry** is a system of wholesale trading whereby goods are paid for in full at the time of purchase and taken away by the purchaser  
a wholesale store operating this system.

A cash and carry store is different from regular retail chains which target professional customers rather than end-consumers. This concept is based around self-service and bulk buying and serves registered customers only. The core customer groups are hotels, caterers, traders and other business professionals. Such stores aim to prevent any intervention by middlemen and requires buyers to make their own arrangements and assume all risk.

**Example:-** By teaming up with Future Group, whose holdings include the Big Bazaar grocery-store chain in India, Carrefour would catch up with global retail rivals Wal-Mart, which plans to open **cash-and-carry** stores with Bharti Enterprises later this year, and Tesco, which has formed an alliance with Indian conglomerate Tata Group to open such stores.