

PAPER – 6 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

Section–A : Information Technology

Attempt all questions.

Question 1

(a) Describe briefly the following terms:

- (i) CMOS
- (ii) Multiprocessing
- (iii) Computer output microfilm
- (iv) Structured Query Language
- (v) DNS Server.

(5 × 1 = 5 Marks)

(b) Explain each of the following:

- (i) Firewalls
- (ii) Flash memory
- (iii) Interpreter
- (iv) Multiplexer
- (v) Transaction log.

(5 × 1 = 5 Marks)

Answer

- (a) (i) CMOS: It is known as complementary metal oxide semiconductor. The PC uses the CMOS memory to store the date, time and system set up parameters, which are loaded every time the computer is started. It is powered by lithium ion battery.
- (ii) Multiprocessing: It refers to the use of two or more central processing units, linked together, to perform coordinated work simultaneously. The jobs can be processed more rapidly. It is also known as parallel processing.
- (iii) Computer Output Microfilm (Microfiche): It is an output technique that records output from a computer as microscopic images on roll or sheet film. These are the same images, which can be printed on paper. The COM recording process reduces characters by 24, 42 or 48 times smaller than the normal size produced by the printer. The information is then recorded on sheet film called 16 mm, 35 mm microfilm or 105 mm microfiche.
- (iv) Structured Query Language (SQL): It is a set of thirty English like commands to create, update and access data from a database allowing users to raise adhoc queries interactively without the help of programmers.
- (v) DNS Server: Domain Name Server is an Internet-wide distributed database system that documents and distributes network specific information such as the associated

IP address for a host name, and vice-versa. The host storing this database is a domain name server.

- (b) (i) Firewalls: Firewall is a device that forms a barrier between a secure and an open environment when the latter environment is usually considered hostile. Generally, it is used to control the flow of traffic between the Internet and an organisation's LAN. It enforces security policies to protect the organisation's internal resources from unwanted intrusion.
- (ii) Flash Memory: Flash memory chips are a form of static RAM (SRAM) chips, which store data much like those used in the computer's primary storage. However, the data stays recorded even when the power is turned off. Flash memory is non-volatile. Flash memory devices have no moving parts, and are therefore very fast.
- (iii) Interpreter: It refers to a language translator that converts source program written in high level language to machine code. Interpreter translates programs a line at a time as it is being run. Each statement is translated into machine language just before it is executed.
- (iv) Multiplexer: It is a device that enables several devices to share one communication line. The Multiplexer scans each device to collect and transmit data on a single line to the CPU, and also communicates transmission from the CPU to the appropriate terminal linked to the multiplexer. The devices are polled and periodically asked whether there is any data to transmit.
- (v) Transaction Log: A transaction log is a file that records database modifications such as insert, update, delete, commit, rollback and database schema changes. The database engine uses a transaction log to apply any changes made between the most recent checkpoint and the system failure.

Question 2

Answer any two of the following:

- (a) Describe various factors which must be considered in determining the best file organisation for a particular application.
- (b) Briefly explain various types of communication services used to transmit data in a network.
- (c) Explain briefly various Disaster Recovery (DR) plans for eliminating Down Time.

(2 × 5 = 10 Marks)

Answer

- (a) The following factors may be considered in determining the best file organization for a particular application:
1. File volatility: It refers to the number of additions and deletions to the file in a given period of time. For a high volatile file, ISAM file is not a good choice. Perhaps other direct access methods would be appropriate, since additions would have to be

placed in the overflow area and constant reorganization of the file will be required. If there are no interrogation requirements, then sequential file organization will be better.

2. **File activity:** It is the proportion of master file records that are actually used or accessed in a given processing run. At one extreme, it is the real-time file where each transaction is processed immediately and hence at a time, only one master record is accessed. This situation obviously requires a direct access method. At the other extreme is a file, such as a payroll master file, where almost every record is accessed when the weekly payroll is processed. In this case, a sequentially ordered master file would be more efficient.
 3. **File interrogation:** It refers to the retrieval of information from a file. If the retrieval of individual records must be fast to support a real-time operation such as airline reservation then some kind of direct organization is required. If, on the other hand, requirements for data can be delayed, then all the individual requests or information can be batched and run in a single processing run with a sequential file organization.
 4. **File Size:** Large files that require many individual references to records with immediate response must be organized under some type of direct access method. On the other hand, with small files, it may be more efficient to search the entire file sequentially or, with a more efficient binary search, to find an individual record than to maintain complex indexes or complex direct addressing scheme.
- (b) **Communication Services:** An organisation that wishes to transmit data uses one of the common carrier services to carry the messages from station to station. Some of the common types of communication services used to transmit data in a network are:
1. **Narrow Band Service:** It is used where data volume is relatively low. The transmission rates usually range from 45 to 300 bits per second. Examples of this service are telephone companies, typewriters exchange service (TWX) and Telex service.
 2. **Voice Band Service:** Voice band services use ordinary telephone lines to send data messages. Transmission rates vary from 300 to 4,800 bits per second, and higher.
 3. **Wide Band Service:** Wide band services provide data transmission rates from several thousands to several million bits per second. These services are limited to high-volume users. Such services generally use coaxial cable or microwave communication.

Communication Services may be either leased or dial up. A leased communication channel, which gives the user exclusive use of the channel, is used where there are continuing data transmission needs. The dial up variety requires the person to dial the computer. This alternative is appropriate when there are periodic data to be transmitted.

- (c) Disaster Recovery (DR) Plans: Data centres need to be equipped with the appropriate disaster recovery system that minimizes downtime for its customers. The following different types of disaster recovery plans are used:
1. Cold site: An alternative facility that is devoid of any resources or equipment, except air conditioning and raised flooring. Equipment and resources must be installed in such a facility to duplicate the critical business functions of an organisation. Cold sites may have variations depending on their communication facilities.
 2. Warm site: An alternate processing site that is only partially equipped, as compared to a hot site, which is fully equipped. It may have shared or dedicated server.
 3. Hot site: An alternative facility that has the equipment and resources to recover business functions that are affected by a disaster. Hot sites may vary in the type of facilities offered such as data processing, communication, or other critical business functions which need duplication. The location and size of the hot site must be proportional to the equipment and resources needed.

Question 3

- (a) Describe the various features of Third-Generation Languages (3GLs) and Fourth-Generation Languages (4GLs).
- (b) What are the Network Threats and Vulnerabilities? (6 + 4 = 10 Marks)

Answer

- (a) These are the main features of the 3GLs and 4GLs:

Sl. No.	Third-Generation Languages 3 GLs	Fourth-Generation Languages 4 GLs
1.	It is intended for use by professional programmers.	It may be used by a non-programming end-programmers, end users as well as a professional programmer.
2.	It requires specification of how to perform the task.	It requires specification of what task to perform (system determines how to perform the task).
3.	It requires that all alternatives be specified.	It is having default alternatives built in; end user need not specify these alternatives.
4.	It requires large number of procedural instructions.	It requires far fewer instructions (less than one-tenth in most cases).
5.	The code may be difficult to read, understand and maintain.	The code is easy to understand and maintain because of English-like commands.
6.	The language developed originally for batch operation.	The language developed primarily for on-line use.

7.	It can be difficult to learn.	Many features can be learned quickly.
8.	It is difficult to debug the error.	Errors easier to locate because of short programs, more structured code, and use of defaults and English-like language.
9.	The approach is typically file-oriented.	The approach is typically data base oriented.

- (b) The threats to the security of system assets can be broadly divided into nine categories:
- (i) Fire,
 - (ii) Water,
 - (iii) Energy variations like voltage fluctuation, circuit breakage, etc.,
 - (iv) Pollution,
 - (v) Intrusions and eavesdropping, which can be eliminated / minimised by physical access controls, prevention of electromagnetic emission and providing the facilities with their proper locations / sites,
 - (vi) Viruses and worms, which can be avoided by using licensed copies of software files, cutting the use of shareware, downloading files or software only from reliable websites, implementing read-only access to software, installing anti-virus software,
 - (vii) Misuse of software, data and services, which can be avoided by preparing employees' code of conduct,
 - (viii) Structural damages and
 - (ix) Hackers, the expected loss from whose activities can be mitigated only by robust logical access controls.

Question 4

A bicycle shop in a city hires bicycles by the day at different rates for different models as given below:

Model No.	Hire rate per day (Rs.)
Model No. 1	14.00
Model No. 2	12.00
Model No. 3	10.00

In order to attract customers, the shopkeeper gives a discount on the number of days a bicycle is hired for. The policy of discount is as given below:

No. of days	Discount rate (%)
1–5	0.00
6–10	8
11 and over	15

For every bicycle hired, a deposit of Rs. 30.00 must be paid.

Develop a flow chart to print out the details for each customer such as name of the customer, bicycle model number, number of days a bicycle is hired for, hire charges, discount and total charges including deposits. (10 Marks)

Answer

The following flow chart is given on next page

Question 5

Write short notes on the following:

- (i) Data warehouse
- (ii) Bullwhip effect in Supply Chain Management. (2 × 5 = 10 Marks)

Answer

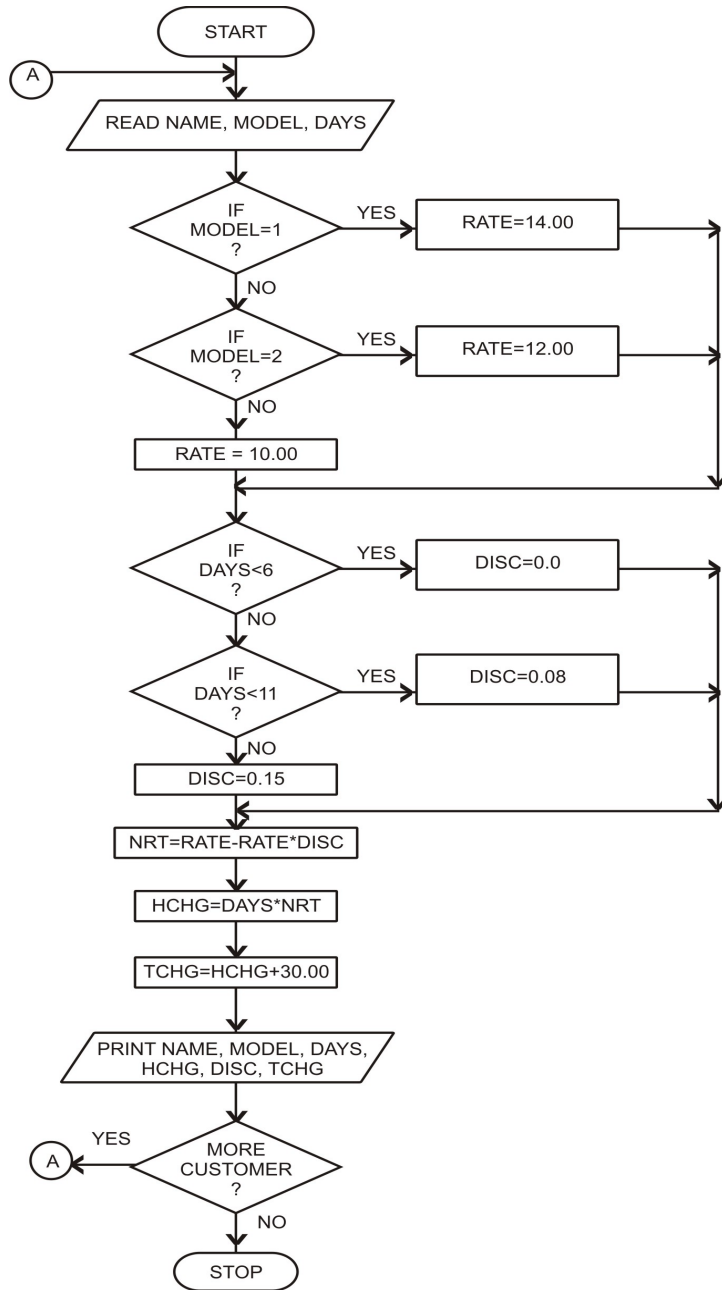
- (i) Data warehouse: It is a computer database that collects, integrates and stores an organization's data with the aim of producing accurate and timely management information and supporting data analysis. It was developed to meet a growing demand for management information and analysis that could not be met by operational systems. Operational systems were unable to meet this need for a range of reasons:

- ◆ The processing load of reporting reduced the response time of the operational systems.
- ◆ The database designs of operational systems were not optimised for information analysis and reporting.
- ◆ Most organizations had more than one operational system, so company-wide reporting could not be supported from a single system.
- ◆ Development of reports in operational systems often requires writing specific computer programs, which is slow and expensive.

As a result, separate computer databases began to be built that were specifically designed to support management information and analysis purposes. These data warehouses were able to bring in data from a range of different data sources.

The advantages of using a data warehouse are:

- ◆ Enhanced end-user access to a wide variety of data.
- ◆ Increased data consistency.
- ◆ Increased productivity and decreases computing costs.
- ◆ It is able to combine data from different sources, in one place.
- ◆ It provides an infrastructure that could support changes to data and replication of the changed data back into the operational systems.



- (ii) Bullwhip Effect in Supply Chain Management: The Bullwhip Effect or Whiplash Effect is an observed phenomenon in forecast driven distribution channels. Because customer demand is rarely perfectly stable, business must forecast demand in order to properly position inventory and other resources. Because of forecast errors, companies often carry an inventory buffer called safety stock. Moving up the supply chain from end consumer to raw materials supplier, each supply chain participant has greater observed variations in demand and thus greater need for safety stock. In periods of rising demand, down stream participants will increase their orders. In periods of falling demand, orders will fall in order to reduce inventory. The effect is that variations are amplified the farther you get from the end-consumer. Supply chain experts call it as Bullwhip effect. The following factors contribute to the Bullwhip Effect:
- (i) Forecast Errors
 - (ii) Lead Time Variability
 - (iii) Batch Ordering
 - (iv) Price Fluctuations
 - (v) Product Promotions
 - (vi) Inflated Orders
 - (vii) Methods intended to reduce uncertainty, variability and lead time
 - (viii) Vendor Managed Inventory (VMI)
 - (ix) Just In Time replenishment (JIT)
 - (x) Strategic Partnership (SP).

Section B : Strategic Management

Question 6

State with reasons which of the following statements is correct/incorrect (Attempt any three):

- (a) "Profit may not be a universal objective but business efficiency is definitely an objective common to all business".
- (b) "Industry is a grouping of dissimilar firms".
- (c) "Resistance to change is an impediment in building of strategic supportive corporate culture".
- (d) "Changes of any type are always disquieting, sometimes they may be threatening."
- (e) "Efficiency and effectiveness mean the same in strategic management".

(3 × 2 = 6 Marks)

Answer

- (a) CORRECT: It is generally asserted that business enterprises are primarily motivated by the objective of profit. Organizations pursue multiple objectives rather than a single objective in which business efficiency is a very useful operational objective. Many organizations, particularly charitable and non-government do not aim for making profits. But in general, all organizations aim for optimum utilization of resources and economy in operational costs.
- (b) INCORRECT: Industry is a consortium of firms whose products or services have homogenous attributes or are close substitutes such that they compete for the same buyer. For example, all paper manufacturers constitute the paper industry.
- (c) CORRECT: Corporate culture refers to a company's values, beliefs, business principles, traditions, ways of operating, and internal work environment. In an organizational effort to build strategic supportive corporate culture resistance can impede its successful implementation and execution.
- (d) INCORRECT: Favourable changes either in the external environment or internal environment are not threatening and/or disquieting. Changes that are initiated by the management to bring improvements in its working are not always disquieting. However, sometimes changes can be threatening especially for old and weak organizations with risk averse and stodgy managers.
- (e) INCORRECT: Efficiency pertains to designing and achieving suitable input output ratios of funds, resources, facilities and efforts whereas effectiveness is concerned with the organization's attainment of goals including that of desired competitive position. While efficiency is essentially introspective, effectiveness highlights the links between the organization and its environment. In general terms, to be effective is to do the right things while to be efficient is to do things rightly.

Question 7

Briefly answer any two of the following:

- (a) What is meant by retrenchment strategy?
- (b) Growth phase of product life cycle.
- (c) Strategic groups. (2 × 2 = 4 Marks)

Answer

- (a) Retrenchment strategy implies substantial reduction in the scope of organization's activity. A business organization can redefine its business by divesting a major product line or market. While retrenching organizations might set objectives below the past level of objectives. It is essentially a defensive strategy adopted as a reaction to operating problems stemming from either internal mismanagement, unanticipated actions by competitors or hostile and unfavourable changes in the business environmental conditions. With a retrenchment strategy the endeavour of management is to raise the

level of enterprise achievements focusing on improvements in the functional performance and cutting down operations with negative cash flows.

- (b) Product life cycle (PLC) is a concept that describes a product's four major life stages, i.e., introduction, growth, maturity and decline in terms of sales, profits, customers, competitors and marketing emphasis. As the product finds market acceptance in introduction stage, it gradually enters the 'Growth' stage. During growth stage there is an exponential rise of the volumes accepted by the market. Many new entrants join the industry and then fight for market share. In this stage consolidation and concentration begins. Profits increase and mass marketing is done with product differentiation.
- (c) Strategic groups are conceptually defined clusters of competitors that share similar strategies and therefore compete more directly with one another than with other firms in the same industry. Strong economic compulsions often constrain these firms from switching one competitive posture to another. Any industry contains only one strategic group when all firms essentially have identical strategies and have comparable market positions. At the other extreme, there are as many strategic groups as there are competitors when each rival pursues a distinctively different competitive approach and occupies a substantially different competitive position in the market place.

Question 8

What do you mean by strategic leadership? What are two approaches to leadership style? To bring in strategic change which three steps may be initiated? (3+3+4 = 10 Marks)

Answer

Strategic leadership is the ability of influencing others to voluntarily make decisions that enhance prospects for the organisation's long-term success while maintaining short-term financial stability. It includes determining the firm's strategic direction, aligning the firm's strategy with its culture, modelling and communicating high ethical standards, and initiating changes in the firm's strategy, when necessary. Strategic leadership sets the firm's direction by developing and communicating a vision of future and inspire organization members to move in that direction. Unlike strategic leadership, managerial leadership is generally concerned with the short-term, day-to-day activities.

Two basic approaches to leadership can be transformational leadership style and transactional leadership style.

Transformational leadership style use charisma and enthusiasm to inspire people to exert them for the good of the organization. Transformational leadership style may be appropriate in turbulent environments, in industries at the very start or end of their life-cycles, in poorly performing organizations when there is a need to inspire a company to embrace major changes. Transformational leaders offer excitement, vision, intellectual stimulation and personal satisfaction. They inspire involvement in a mission, giving followers a 'dream' or 'vision' of a higher calling so as to elicit more dramatic changes in organizational performance. Such a leadership motivates followers to do more than originally affected to do by stretching

their abilities and increasing their self-confidence, and also promote innovation throughout the organization.

Whereas, transactional leadership style focus more on designing systems and controlling the organization's activities and are more likely to be associated with improving the current situation. Transactional leaders try to build on the existing culture and enhance current practices. Transactional leadership style uses the authority of its office to exchange rewards, such as pay and status. They prefer a more formalized approach to motivation, setting clear goals with explicit rewards or penalties for achievement or non-achievement.

Transactional leadership style may be appropriate in settled environment, in growing or mature industries, and in organizations that are performing well. The style is better suited in persuading people to work efficiently and run operations smoothly.

For initiating strategic change, three steps can be identified as under:

- (i) Recognise the need for change: The first step is to diagnose which facets of the present corporate culture are strategy supportive and which are not. This basically means going for environmental scanning involving appraisal of both internal and external capabilities may it be through SWOT analysis and then determine where the lacuna lies and scope for change exists.
- (ii) Create a shared vision to manage change: Objectives and vision of both individuals and organization should coincide. There should be no conflict between them. Senior managers need to constantly and consistently communicate the vision not only to inform but also to overcome resistance through proper communication. Strategy implementers have to convince all those concerned that the change in business culture is not superficial or cosmetic. The actions taken have to be credible, highly visible and unmistakably indicative of management's seriousness to new strategic initiatives and associated changes.
- (iii) Institutionalise the change: This is basically an action stage which requires implementation of changed strategy. Creating and sustaining a different attitude towards change is essential to ensure that the firm does not slip back into old ways of thinking or doing things. Capacity for self-renewal should be a fundamental anchor of the new culture of the firm. Besides, change process must be regularly monitored and reviewed to analyse the after-effects of change. Any discrepancy or deviation should be brought to the notice of persons concerned so that the necessary corrective actions are taken. It takes time for the changed culture to prevail.

Question 9

Under what conditions would you recommend the use of Turnaround strategy in an organization? What could be a suitable work plan for this? (5+5 = 10 Marks)

Answer

Rising competition, business cycles and economic volatility have created a climate where no business can take viability for granted. Turnaround strategy is a highly targeted effort to return an organization to profitability and increase positive cash flows to a sufficient level.

Organizations those have faced a significant crisis that has negatively affected operations requires turnaround strategy. Turnaround strategy is used when both threats and weaknesses adversely affect the health of an organization so much that its basic survival is a question. When organization is facing both internal and external pressures making things difficult then it has to find something which is entirely new, innovative and different. Being organization's first objective is to survive and then grow in the market; turnaround strategy is used when organization's survival is under threat. Once turnaround is successful the organization may turn to focus on growth.

Conditions for turnaround strategies

When firms are losing their grips over market, profits due to several internal and external factors, and if they have to survive under the competitive environment they have to identify danger signals as early as possible and undertake rectification steps immediately. These conditions may be, inter alia cash flow problems, lower profit margins, high employee turnover and decline in market share, capacity underutilization, low morale of employees, recessionary conditions, mismanagement, raw material supply problems and so on.

Action plan for turnaround strategy

Stage One – Assessment of current problems: The first step is to assess the current problems and get to the root causes and the extent of damage the problem has caused. Once the problems are identified, the resources should be focused toward those areas essential to efficiently work on correcting and repairing any immediate issues.

Stage Two – Analyze the situation and develop a strategic plan: Before you make any major changes; determine the chances of the business's survival. Identify appropriate strategies and develop a preliminary action plan. For this one should look for the viable core businesses, adequate bridge financing and available organizational resources. Analyze the strengths and weaknesses in the areas of competitive position. Once major problems and opportunities are identified, develop a strategic plan with specific goals and detailed functional actions.

Stage Three – Implementing an emergency action plan: If the organization is in a critical stage, an appropriate action plan must be developed to stop the bleeding and enable the organization to survive. The plan typically includes human resource, financial, marketing and operations actions to restructure debts, improve working capital, reduce costs, improve budgeting practices, prune product lines and accelerate high potential products. A positive operating cash flow must be established as quickly as possible and enough funds to implement the turnaround strategies must be raised.

Stage Four – Restructuring the business: The financial state of the organization's core business is particularly important. If the core business is irreparably damaged, then the outlook for the entire organization may be bleak. Prepare cash forecasts, analyze assets and debts, review profits and analyze other key financial functions to position the organization for rapid improvement.

During the turnaround, the "product mix" may be changed, requiring the organization to do some repositioning. Core products neglected over time may require immediate attention to

remain competitive. Some facilities might be closed; the organization may even withdraw from certain markets to make organization leaner or target its products toward a different niche.

The 'people mix' is another important ingredient in the organization's competitive effectiveness. Reward and compensation systems that encourage dedication and creativity encourage employees to think profits and return on investments.

Stage Five – Returning to normal: In the final stage of turnaround strategy process, the organization should begin to show signs of profitability, return on investments and enhancing economic value-added. Emphasis is placed on a number of strategic efforts such as carefully adding new products and improving customer service, creating alliances with other organizations, increasing the market share, etc.

Question 10

Read the following case and answer the question given at the end:

In 2006-07 PTC Food division decided to enter the fast growing (20-30% annually) snacks segment, an altogether new to it. It had only one national competitor- Trepsico's Trito. After a year its wafer snack brand – Ringo, fetched 20% market share across the country. Ringo's introduction was coincided with the cricket world Cup. The wafer snacks market is estimated to be around Rs. 250 crores.

The company could take the advantage of its existing distributing network and also source potatoes from farmers easily. Before the PTC could enter the market a cross- functional team made a customer survey through a marketing research group in 14 cities of the country to know about the snacks of eating habits of people. The result showed that the customers within the age-group 15-24 years were the most promising for the product as they were quite enthusiastic about experimenting new snack taste. The company reported to its chefs and the chefs came out with 16 flavours with varying tastes suiting to the targeted age-group.

The company decided to target the youngsters as primary target on the assumption that once they are lured in, it was easier to reach the whole family.

Advertising in this category was extremely crowded. Every week two-three local products in new names were launched, sometimes with similar names. To break through this clutter the company decided to bank upon humour appeal.

The Industry sources reveal that PTC spent about Rs. 50 crores on advertisement and used all possible media – print and electronic, both including the creation of its own website, Ringoringyoung.com with offers of online games, contest etc. Mobile phone tone downloading was also planned which proved very effective among teenagers. The site was advertised on all dotcom networks. Em TV, Shine TV, Bee TV and other important channels were also used for its advertisement alongwith FM radio channels in about 60 cities with large hoardings at strategic places.

Analysts believe that Ringo's success story owes a lot to PTC's widespread distribution channels and aggressive advertisements. Humour appeal was a big success. The 'Ringo' was made visible by painting the Railways bogies passing across the States. It has also been successful to induce Lovely Brothers' Future Group to replace Trito in their Big- Bazaar and

chain of food Bazaars. PTC is paying 4% higher margin than Trepsico to Future group and other retailers.

Ringo to giving Trepsico a run for its money. Trito's share has already been reduced considerably. Retail tie-ups, regional flavours, regional humour appeals have helped PTC. But PTC still wants a bigger share in the market and in foreign markets also, if possible.

Questions 10

- (a) What is SWOT Analysis? (4 Marks)
- (b) What are the strength of PTC ? (4 Marks)
- (c) What are the weaknesses of PTC for entering into the branded snacks market? (4 Marks)
- (d) What kind of marketing strategy was formulated and implemented for Ringo? (8 Marks)
What else need to be done by Ringo so as to enlarge its market?

Answer

- (a) SWOT analysis is a tool used by organizations for evolving strategic options for the future. The term SWOT refers to the analysis of strength, weaknesses, opportunities and threats facing a company. Strengths and weaknesses are identified in the internal environment, whereas opportunities and threats are located in the external environment.
Strength: Strength is an inherent capability of the organization which it can use to gain strategic advantage over its competitor.
Weakness: A weakness is an inherent limitation or constraint of the organisation which creates strategic disadvantage to it.
Opportunity: An opportunity is a favourable condition in the external environment which enables it to strengthen its position.
Threat: An unfavourable condition in the external environment which causes a risk for, or damage to the organisation's position.
- (b) The strengths of PTC are:
 - (a) PTC has an existing distribution network that is used to its advantage.
 - (b) The company has strengths in the area of procurement of potato, raw material to make the wafers.
 - (c) Financially the company is very strong as they are spending 50 crores on advertising in a market worth 250 crores.
 - (d) The company has diverse flavours of wafers in its portfolio that are according to the different tastes of the target group.
 - (e) PTC has done good bargaining deals with food bazaars and food chains.
 - (f) The cross-functional team of PTC made a virtuous marketing research.

- (c) Weaknesses are inherent limiting factors of an organization. They are internal by nature to the working of the organization. The case study does not clearly mention the points that can conclusively be weaknesses of the company. However, a deeper analysis will bring out that the company is totally new to the snacks business and is highly aggressive in its approach.

The experience in the food business may not result in the required competencies in the business of chips. Seemingly, the company has also gone overboard in its advertisement expenditure. It may be that the margins justify expenditure of 20% in value of the total market size of Rs. 250 Crores. Otherwise, the company may come into financial difficulties. Creating market may also be difficult as already there are many players who are trying to get attention of existing and new customers.

The business is already cluttered with regional and national players and is highly competitive. Further, the company is overly relying on young segment of the population. This segment can be highly receptive to the new products and the company may lose them easily to the competitors.

- (d) Formulation and Implementation of marketing strategy was as under:

The Product: To launch its snack product, an easy to remember brand name RINGO was decided upon. To understand the snacking habits of Indian customer a large survey was undertaken. Chefs on the basis of the market survey came out with sixteen flavours. The target group was identified as youngsters of 15 – 24 years.

The Promotion: The company spent about Rs.50 crore on marketing communication. Different Media including print, electronic and outdoor advertising were put to use. Appeal used was that of humour. A huge visibility through point-of-sale was also arranged. Promotion policy was very aggressive considering that 50 crores were spent in a market of 250 crores.

The Place: Getting Trito replaced by Ringo in Big-Bazaar and food Bazaar chain of stores was a great success for PTC. To motivate a higher margin than the Trepsico was provided for. PTC even otherwise has extensive distribution network.

A perfect blend of marketing mix has made it possible to go so far and so early. Since the marketing strategy has remained successful, they need to carry it forward. However, they also need to keep a restrain on promotion as spending huge amount of money on marketing for a share in the market of 250 crores seems to be too high. Such an expensive campaign is only suitable if the company is able to increase the market size itself and not merely its own in the existing market share. To achieve this it requires competencies. Otherwise, it might be difficult to sustain high expenditure over a very long period of time.