

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION – A : INFORMATION TECHNOLOGY

Question No. 1 is compulsory

*Answer any **five** questions from the rest.*

Question 1

Answer all the following questions in brief:

- (a) *Why a virtual memory in computer is required?*
- (b) *What is the importance of the clock speed in computers?*
- (c) *What do you understand by “Message Switching”?*
- (d) *Explain the function of “Arithmetic Logic Unit”.*
- (e) *Differentiate between the “File Volatility” and the “File Activity”.* (5 x 2=10 Marks)

Answer

- (a) **Virtual Memory:** A programmer has to take into account the size of the memory to fit all his instructions and the data to be operated in the primary storage. If the program and the related data are larger than the capacity of the memory, then the programmer has to use the concept of virtual memory. Virtual memory systems, sometimes called virtual storage systems, extend primary memory by treating the secondary storage or disk storage as a logical extension of RAM or primary memory. The technique works by dividing a program on disk into pages or into logical variable length segments and calling the required page to memory whenever required.
- (b) **Clock Speed:** The clock speed is the speed at which the processor executes instructions. Clock speed is measured as a frequency in megahertz (MHz) or gigahertz (GHz) which is one million cycles per second or one billion cycles per second respectively. Higher the clock speed, the faster will be the processor with better system performance.
- (c) **Message Switching:** In this switching method, heavy volume of data is transmitted using special computer for the purpose of data transmission. The computer receives all transmitted data; stores it; and, when an outgoing communication line is available, forwards it to the receiving point. Thus, the whole message is transmitted in one go.
- (d) **Arithmetic Logic Unit:** The actual processing of the data and instructions are performed by arithmetic logic unit. It performs mathematical calculations, compares numeric and non-numeric values and makes decisions. The major operations performed by the ALU are addition, subtraction, multiplication, division, logic and comparison. Data flows between ALU and the storage unit during processing. Specifically, data is transferred as needed from the storage unit to the ALU, manipulated and returned to the storage unit.

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

- (e) **File Volatility:** refers to the number of additions and deletions to the file in a given period of time. A file that constantly keeps changing is a highly volatile file. An Indexed-sequential file organization will not be suitable for such files, because additions have to be placed in the overflow area and constant reorganization of the file would have to occur. Other direct access methods would be a better choice. Even the sequential file organization would be appropriate if there are no interrogation requirements.

File Activity: On the other hand is the proportion of master file records that are actually used or accessed in a given processing run. At one extreme 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 such case, a sequentially ordered file would be more efficient.

Question 2

- (a) *Describe any four limitations of the Computer system.* (4 Marks)
- (b) *What do you understand by "Data Definition Language" (DDL)? Write the various functions of the DDL.* (4 Marks)

Answer

- (a) **Limitations of the Computer System are enumerated below:**

1. **Programmed by humans:** Computers work according to programs prepared by human beings. Without a program, computer is nothing. If a program is not correct, the working of computer will not be accurate.
2. **No Intelligence:** Though computers are faster, accurate, more diligent and versatile than human beings, they cannot replace them as they do not have any intelligence. They require instructions given by human beings to carry out any task.
3. **No decision making power:** Computers cannot take any decision by themselves, nor can it help solve any problem by itself. For example, playing chess with the computer requires certain instructions to be given to the computer by the programmer to perform specific task.
4. **Curtail human capabilities:** Human beings are increasingly becoming dependent on computers. Many times people find it difficult to perform simple arithmetic operations, or remember telephone numbers etc. Excessive use of computers is causing various types of health injuries to users.

- (b) **Data Definition Language (DDL):** It defines the conceptual schema providing a link between the logical and the physical structures of database.

Following are the functions of a DDL:

- (a) They define the physical characteristics of each record, field in the record, field's data type, field's length, field's logical name and also specify relationships among the records;
- (b) They describe the schema and subschema;
- (c) They indicate the keys of the record;
- (d) They provide means for associating related records or fields;
- (e) They provide for data security measures;
- (f) They provide for logical and physical data independence.

Question 3

- (a) *Explain the significance of utility programs. List the various tasks that are performed by the utility programs.* (4 Marks)
- (b) *Discuss the various tools that are available for the protection of information and system against compromise, intrusion or misuse.* (4 Marks)

Answer

- (a) Utility programs are system programs that perform general system support tasks. These programs perform tasks that are common to all data processing installations and are provided by the computer manufacturers. Some of them may either be programs in their own right or subordinates to be assembled/compiled in the application programs. Utility programs perform the following tasks:
 - (i) Sorting and storing the data.
 - (ii) Checking or scanning the data stored on hard disk for security reasons.
 - (iii) Making a copy of all information stored on a disk.
 - (iv) Performing routine data management tasks, such as deleting, renaming, moving, copying, merging, generating and modifying data sets.
 - (v) Providing encryption and decryption of data.
 - (vi) Analyzing the computer's network connectivity, configure network settings, check data transfer or log events.
 - (vii) Partitioning of drive into multiple logical drives, each with its own file system.
 - (viii) Converting data from one recording medium to another, viz., floppy disk to hard disc, tape to printer, etc.

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

- (ix) Dumping of data to disc or tape.
- (x) Tracing the operation of the program.
- (b) Following tools are available to protect information and system against compromise, intrusion or misuse:
 - (i) **Firewalls:** They are systems to control the flow of traffic between the Internet and the firm's internal LAN and systems. They are usually packaged as turnkey hardware/software packages and are setup to enforce the specific security policies that are desired. A firewall is a proven, effective means of protecting the firm's internal resources from unwanted intrusion.
 - (ii) **Encryption:** It allows information to transmit on the Internet while being protected from interception by eavesdroppers. There are two basic approaches to encryption:
 - Hardware Encryption: - The devices are available at a reasonable cost, and can support high-speed traffic.
 - Software Encryption: - It is typically employed in conjunction with specific applications. Certain electronic mail packages, for example, provide encryption and decryption for message security.
 - (iii) **Message authentication:** It makes sure that a message is really from whom it purports to be and that it has not been tampered with.
 - (iv) **Site blocking:** This is a software based approach that prohibits access to certain websites that are deemed inappropriate by management. For example, sites that contain explicit objectionable material can be blocked to prevent employees from accessing these sites from company's Internet server. In addition to blocking sites, companies can also log activities and determine the amount of time spent on the Internet and identify the sites visited.

Question 4

- (a) *Discuss various advantages and disadvantages of Star Network Topology.* (4 Marks)
- (b) *"Supply Chain Management should focus on certain problems." Discuss these problems in details.* (4 Marks)

Answer

(a) Advantages of Star Network Topology:

1. It is easy to add and remove nodes in this topology.
2. A node failure does not bring down the entire network.
3. It is easier to diagnose network problems through a central hub.

Disadvantages of Star Network Topology:

1. If the central hub fails, the whole network ceases to work.
2. It costs more to cable a star configuration than other topologies.

(b) Problems on which Supply Chain Management (SCM) should focus are stated below:

1. **Distribution Network Configuration:** Number and location of suppliers, production facilities, distribution centers, warehouses and customers.
2. **Distribution Strategy:** Centralized versus decentralized, direct shipment, cross docking, pull or push strategies, third party logistics.
3. **Information:** Integrate systems and processes through the supply chain to share valuable information, including demand signals, forecasts, inventory and transportation.
4. **Inventory management:** Quality and location of inventory including raw materials, work-in-process and finished goods.

Question 5

- (a) *For computing custom duty, the imported items are classified into 4 categories.*

The rate of duty to be levied on each category of items is given below:

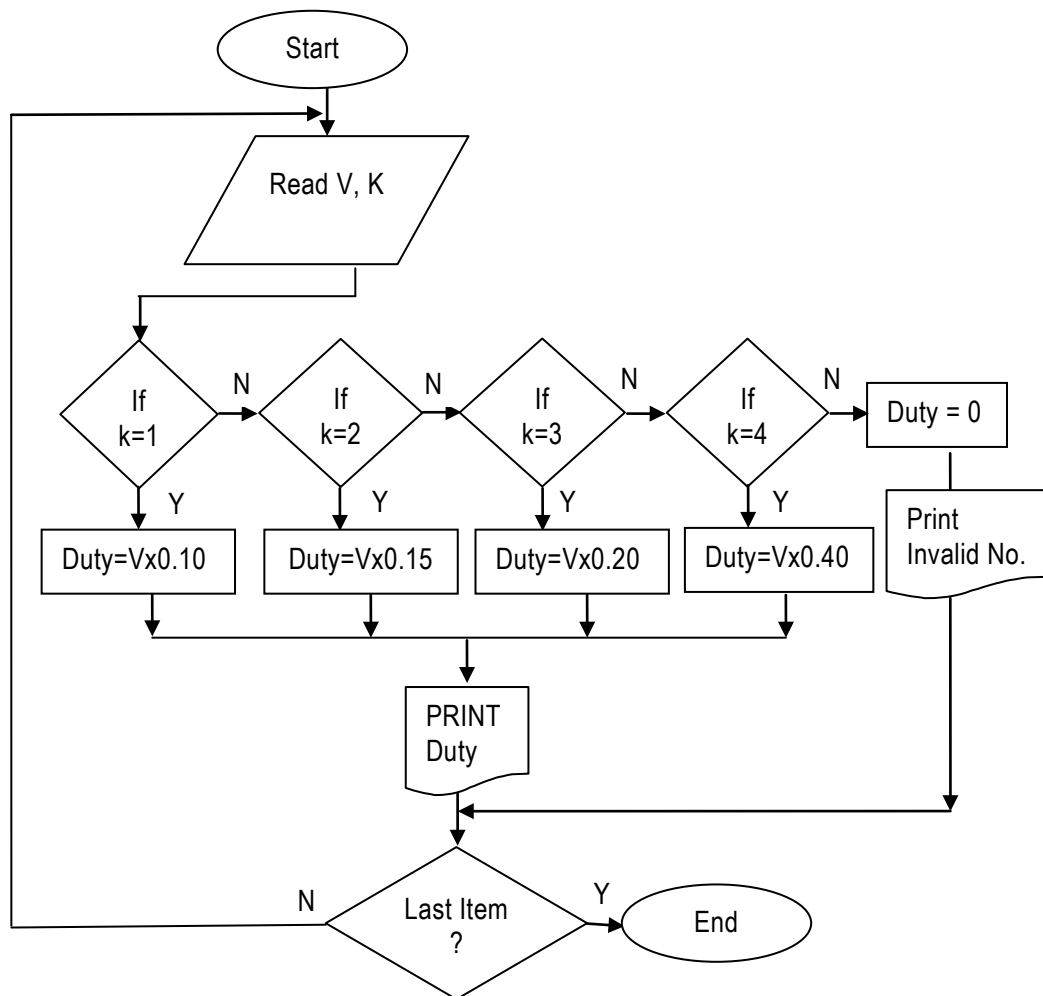
Category (K)	Class of goods	% custom duty on the value of goods (V)
1	Food and beverages	10
2	Textile and leather goods	15
3	Heavy machinery	20
4	Luxury items	40

Draw a flowchart to compute the custom duty. (4 Marks)

- (b) *Explain the necessity of the decision table. Discuss the different parts of the decision table.* (4 Marks)

Answer

- (a) The required flowchart is given in next page.



Abbreviation:

V = Value of goods K = Category of goods Duty = Custom duty

- (b) A decision table is a table which may accompany a flowchart, defining the possible contingencies that may be considered within the program and the appropriate course of action for each contingency. Decision tables are necessitated by the fact that branches of the flowchart multiply at each diamond (comparison symbol) and may easily run into scores and even hundreds. If, therefore, the programmer attempts to draw a flowchart directly, he is liable to miss some of the branches.

A decision table is divided into four parts:

- (i) **Condition Stub:** It comprehensively lists the comparisons and conditions.

INTEGRATED PROFESSIONAL COMPETENCE EXAMINATION : MAY, 2011

- (ii) **Action Stub:** It comprehensively lists the actions to be taken along the various program branches.
- (iii) **Condition entries:** They enable to list in its various columns the possible permutations of answers to the questions in the condition stub.
- (iv) **Action entries:** They enable to list in its various columns corresponding to the conditions entries the actions contingent upon the set of answers to questions of that column.

Question 6

- (a) *"The efficiency and effectiveness for end user applications is limited due to some problems which are associated with File Processing System." Explain these problems.*

(4 Marks)

- (b) *How does Customer Relationship Management (CRM) improve customer relationship?*

(4 Marks)

Answer

- (a) Following problems are observed with File Processing System that limit its efficiency and effectiveness for end user applications:
- (i) **Data Duplication:** Independent data files include a lot of duplicated data that causes problems when data is to be updated; since separate file maintenance programs need to be developed and coordinated to ensure that each file is properly updated.
 - (ii) **Lack of Data Integration:** Data in independent files makes it difficult to provide end users with information for ad-hoc requests that require accessing data stored in several different files. Special computer programs have to be written to retrieve data from each independent file. This is difficult, time consuming, and expensive for the organizations.
 - (iii) **Data Dependence:** In file processing system, the major components of a system i.e. organization of files, their physical location on storage, hardware and the application software used to access those files depend on one another in significant ways. Thus, if changes are made in the format and structure of data and records in a file, changes have to be made in all the programs that use this file. This program maintenance effort is a major burden of file processing system and results in a lot of inconsistency in the data files.
 - (iv) **Data Integrity and Security:** There are certain integrity constraints defined in DBMS to protect and unauthorized access to the data in the database. For example, when inserting the data for a particular field say salary for an employee database, it cannot be null. Such type of constraints does not allow the user to leave the field blank thus providing integrity and security on the database. However, in file

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

processing systems, such type of integrity constraint and security aspects are lacking. The integrity (i.e. the accuracy and completeness) of the data is suspected in file processing system because there is no control over their use and maintenance by authorized end users.

- (b) Customer Relationship Management (CRM) programs are able to improve customer relationship because of the following reasons:
- (i) CRM technology can track customer interests, needs and buying habits as they progress through their life cycles and tailor the marketing effort accordingly. In this manner, the customers get exactly what they want as per their changing requirements.
 - (ii) It can track customer's product use as the product progresses through its life cycle and tailor the service strategy accordingly. This way the customers get what they need as the product ages.
 - (iii) In industrial markets, the technology can be used to micro-segment the buying centre and help coordinate the conflicting purchase criteria of its members.
 - (iv) It ensures long term customer satisfaction resulting into repeat purchases, improved customer relationships, increased customer loyalty, decreased customer turnover, decreased marketing costs, increased sales revenue and thereby increase in profit margins.

Question 7

Answer any **four** questions:

- (a) What are the functions of a "Control Unit"?
- (b) Explain briefly "Asynchronous Transmission".
- (c) Write short note on "Mobile Commerce".
- (d) What are the advantages of using a data warehouse?
- (e) How does the "Random Access Method" which is a part of the direct access file organization method perform? (4 x 2 = 8 Marks)

Answer

(a) Functions of a "Control Unit" in a computer system:

The control unit extracts instructions from memory, decodes and executes them, and sends the necessary signals to the ALU to perform the operation needed. The CPU's instructions for carrying out commands are built into the control unit. The instructions, or instruction set, list all the operations that the CPU can perform. Each instruction in the instruction set is expressed in microcode - a series of basic directions that tell the CPU how to execute more complex operations. Before a program can be executed, every command in it must be broken down into instructions that correspond to the ones in the

CPU's instruction set. When the program is executed, the CPU carries out the instructions, in order, by converting them into microcode. All the computer's resources are managed from the control unit.

- (b) **Asynchronous Transmission:** In asynchronous transmission mode, each character (1 byte) to be transmitted is preceded by a start bit and terminated by one or more stop bits. The function of start bit is to tell the receiver where the new character starts and the function of the stop bit is to tell the receiver that the character has ended. This mode of transmission is designed for a situation where the characters are transmitted intermittently. This mode is inefficient as compared to the synchronous transmission as the extra start and stop bits slow down the process of data transmission when there is huge volume of data to be transmitted.
- (c) **Mobile Commerce (m-Commerce):** This is the buying and selling of goods and services through wireless handheld devices such as cellular phones and personal digital assistants (PDAs). Mobile Commerce enables users to access the Internet without needing to find the place to plug in. In order to exploit the m-commerce market potential, manufacturers are working to develop wireless application protocol (WAP) enabled smart phones and ways to reach them. Using Bluetooth technology, smart phones offer fax, e-mail and phone capabilities all in one, paving the way for m-commerce to be accepted by an increasingly mobile workforce. As content delivery over wireless devices becomes faster, more secure and scalable, m-commerce will surpass wireline e-commerce as the method of choice for digital commerce transactions.
- (d) **Advantages of using a data warehouse are listed below:**
 - (i) It enhances end-user access to a wide variety of data.
 - (ii) It increases data consistency.
 - (iii) It increases productivity and decreases computing costs.
 - (iv) It is able to combine data from different sources, in one place.
 - (v) It provides an infrastructure that could support changes to data and replication of the changed data back into the operational systems.
- (e) **Random Access Method:** In this method, transactions can be processed in any order and written at any location through the stored file. Records are stored on disk by using a hashing algorithm. The key field is fed through hashing algorithm and a relative address is created. This address gives the position on the disk where the record is to be stored. The desired record can be directly accessed using randomizing procedure or hashing without accessing all other records in the file.

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION – B : STRATEGIC MANAGEMENT

Question number 8 is compulsory.

*Attempt any **Five** questions from the rest.*

Question 8

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

Sharp Corporation is a worldwide developer of innovative products and core technologies that play a key role in shaping the future of electronics. As a leader in liquid crystal displays (LCDs) and digital technologies, Sharp offers one of the broadest and most advanced lines of consumer electronics, information products and electronic components, while also creating new network businesses. Sharp Corporation has travelled a long way from an assembler of televisions to a leading TV manufacturer. In its early days as business enterprise, the company was making low quality and low price TVs and was, thus overshadowed by the giants like Sony, Samsung and Matsushita. It was a technology follower in the beginning and was using secondary technology. The brand image, too, was not very high. Sharp, under the leadership of Machida, went for a brand image makeover by using innovation. The new leader has concentrated on R & D, in addition to enhancing its market coverage.

Its innovation in liquid crystal display (LCD) technology and developing products featuring LCD's made at the reputed electronics company in Japan. Sharp is now the world's largest manufacturer of LCD TVs. The company has very well succeeded and sustaining its success is a major critical factor: its focus on innovation. Unfortunately, the global economic downturn has hit Sharp worse than the most American Companies. The industry as a whole, and Sharp in particular, realised the fact that only innovation in terms of quality, cost and competitive strength is the main survival factor. At the same time the industry is not unaware of the fact that every new technology will obsolete faster. Average life of every new technology is becoming shorter and shorter.

The ever changing competitive scenario with the global competitors waging to dethrone Sharp and the entry of low cost manufacturers from Asia, have created some of the biggest challenges for Sharp. Newer display technologies with superior quality at a lesser price are emerging in the international market. Sharp has taken the first mover advantage, but is facing competition from the late entrants.

Questions:

- | | |
|---|-----------|
| (i) What are the strengths of Sharp Corporation? | (3 Marks) |
| (ii) What are the weaknesses of Sharp Corporation? | (3 Marks) |
| (iii) What should be the next move of Sharp Corporation? | (3 Marks) |
| (iv) Analyse the key success factors for LCD TV Industry. | (6 Marks) |

Answer

- (i) Strength is an inherent capability of an organisation which it can use to gain strategic advantage over its competitors. An important strength of Sharp Corporation is its ability to innovate continuously. Besides, it has adopted the business in core technologies that explain the future of electronics. It has one of the broadest and most advanced lines of consumer electronics, information products and electronic components, while also creating new network businesses.

Sharp Corporation has abilities to convert opportunities into its strengths. It has successfully converted first mover advantage to become the world's largest manufacturer of LCD TVs. The organization is also strong in R & D as more efforts have been given on it under the leadership of Machida. Sharp Corporation is making efforts to innovate, reduce cost and promoting brand image. These efforts are directed towards creating strengths.

- (ii) A weakness is an inherent limitation or constraint of an organisation which creates strategic disadvantage to it. Sharp is not able to capitalize or carry its first mover advantage and market leader position to its advantage from long term perspective. Most of the actions that are being taken later by the company are in the form of imperative reactions. The company is finding it difficult to take a proactive decision which is a major weakness.

The weakness also lies in its inability to adopt competitive strategy according to the nature of competition. In its early days of business, it adopted low quality and low price strategy and it faced competition from giants like Sony, Samsung and Matsushita. Later, it adopted differentiation strategy with highly innovative products without economising on cost; resulting in competition from cost effective rivals. Sharp Corporation has not been able to diagnose the environment realistically. Its inability to adapt to the changing competitive scenario has resulted in the possibility of being dethroned from the market or at least being badly hit in its sales.

- (iii) The next move of Sharp Corporation should be to revamp its value chain so as to create competitive advantage both in terms of superior products as well as in terms of low cost. There is a lot of scope for gaining by its experience as manufacturer of low cost products as well as products of high quality. This will enable it to adopt best cost provider strategy instead of either differentiation or low cost strategy. It should explore the suitability of focused strategy where competition is relatively low. It can also explore the possibility of taking over some small competitors or entering into strategic alliance with big competitors. It has to design strategy to keep Asian Companies at bay to sustain its brand image and market share. It can use its brand image to establish shops in Asian markets.

- (iv) An industry's Key Success Factors (KSFs) are those things that most affect industry members' ability to prosper in the marketplace – the particular strategy elements, product attributes, resources, competencies, competitive capabilities, and business outcomes

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

that spell the difference between profit and loss and, ultimately, between competitive success or failure. The answers to following three questions will help to identify an industry's key success factors:

- On what basis do customers choose between the competing brands of sellers? The question of adding value to the products can also be given due weightage to make its presence deeper.
- 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?

A highly important key success factor for the company is the ability to innovate in this technologically evolving product. Customers are looking forward to better products. The LCD TV is as such an emerging industry and, there is lot of uncertainty about how it will develop in future, how fast it will grow, and big it will become. Alternative, technologies such as LED and Plasma display are also being offered and getting popular.

The factors affecting customer choice, sellers' competitive capabilities and sustainable competitive advantage are not proved. Strategic success in such an industry calls for bold entrepreneurship, a willingness to pioneer and take risks, an intuitive feel of what the buyers will like, quick response to new developments, and opportunistic strategy making. The early leaders in this industry cannot rest on their laurels; they must drive hard to strengthen their resource capabilities and build a position strong enough to ward off newcomers and compete successfully for the long haul.

Question 9

- (a) State with reasons which of the following statements is correct or incorrect.
- (i) The term PESTLE analysis is used to describe a framework for analyzing the micro-environmental factors.
 - (ii) Marketers alone can deliver superior value to customers. (2 x 2 = 4 Marks)
- (b) Fill in the blanks in the following statements with the most appropriate word:
- (i) The orientation of the redesign effort refers to a total _____ and rethinking of entire business process.
 - (ii) The corporate mission is an expression of the _____ of the firm.
 - (iii) Michael Porter's Generic strategies allow organizations to gain competitive advantages by cost leadership, _____ and focus. (3 x 1 = 3 Marks)

Answer

- (a) (i) **Incorrect:** The term PESTLE Analysis is used to describe a framework for analysis of macro environmental factors. It involves identification of political, economic, socio-cultural, technological, legal and environmental influences on an organization

INTEGRATED PROFESSIONAL COMPETENCE EXAMINATION : MAY, 2011

and providing a way of scanning the environmental influences that have affected or are likely to affect an organization or its policy. The advantage of this tool is that it encourages management into proactive and structured thinking in its decision making.

- (ii) **Incorrect:** A marketer alone cannot deliver superior value to the customers. It needs to work in coordination with other departments to accomplish this. It is important to be part of organization chain & marketer needs to work in coordination with other departments in the search for competitive advantages. Organisations need to look at the value chain network along with its own chain of activities and the chain of suppliers, distributors and ultimately customers.

- (b) (i) Deconstruction
(ii) Growth ambition
(iii) Differentiation

Question 10

Explain the meaning of the following concepts:

- (i) Corporate Strategy
(ii) Strategic Group Mapping
(iii) Relationship Marketing
(iv) Supply Chain Management
(v) Out bound Logistics
(vi) Business Process Re-engineering
(vii) Combination Strategies

(7 x 1 = 7 Marks)

Answer

- (i) **Corporate strategy** is basically the growth design of the firm; it spells out the growth objective - the direction, extent, pace and timing of the firm's growth. It also spells out the strategy for achieving the growth. It serves as the design for filling the strategic planning gap. It also helps build the relevant competitive advantages.
- (ii) **Strategic group mapping** is a technique for displaying the different markets or competitive positions that rival firms occupy in the industry. A strategic group is a cluster of firms in an industry with similar competitive approaches and market positions. An industry contains only one strategic group when all sellers pursue essentially identical strategies and have comparable market positions.
- (iii) **Relationship marketing** is the process of creating, maintaining, and enhancing strong, value-laden relationship with customers and other stakeholders, thus, providing special benefits to select customers to strengthen bonds. It will go a long way in building relationship.

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

- (iv) **Supply chain management** is a tool of business transformation and involves delivering the right product at the right time to the right place and at the right price. It reduces costs of organisations and enhances customer service by linkages between suppliers, manufacturers and customers. Supply chain management is an extension of logistics management.
- (v) **Outbound logistics** relate to collection, storage and distribution of the product to customers. It includes all activities such as storage/warehousing of finished goods, order processing, scheduling deliveries, operation of delivery vehicles, etc.
- (vi) **Business process reengineering** refers to the analysis and redesign of workflows and processes both within and between the organisations – it is a total deconstruction and rethinking of a business process in its entirety, unconstrained by its existing structure and pattern. It is an approach to unusual improvement in operating effectiveness through the redesigning of critical business processes and supporting business systems.
- (vii) **Combination Strategies** refer to a mix of different strategies like stability; expansion, diversification or retrenchment to suit particular situations that an enterprise is facing. For instance, a strategy of diversification/acquisition may call for retrenchment in some obsolete product lines.

Question 11

- (a) *“Evaluating the worth of a business is central to strategy implementation.” In the light of this statement, explain the methods that can be used for determining the worth of a business.* (4 Marks)
- (b) *ABC Ltd. plans to introduce changes in its structure, technology and people. Explain how Kurt Lewin’s change process can help this firm.* (3 Marks)

Answer

- (a) It is true that evaluating the worth of a business is central to strategy implementation. There are circumstances where it is important to evaluate the actual worth of the business. These circumstances can be wide and varied. At a higher level they may include acquisition, mergers or diversification. They may also include other situations such as fixing of share price in an issue. Acquisition, merger, retrenchment may require establishing the financial worth or cash value of a business to successfully implement such strategies.

Various methods for determining a business’s worth can be grouped into three main approaches.

- (i) **Net worth or stockholders’ equity:** Net worth is the total assets minus total outside liabilities of an individual or a company.
- (ii) **Future benefits to owners through net profits:** These benefits are considered to be much greater than the amount of profits. A conservative rule of thumb is to

establish a business's worth as five times the firm's current annual profit. A five-year average profit level could also be used.

- (iii) **Market-determined business worth:** This, in turn, involves three methods. First, the firm's worth may be based on the selling price of a similar company. The second approach is called the price-earnings ratio method whereby the market price of the firm's equity shares is divided by the annual earnings per share and multiplied by the firm's average net income for the preceding years. The third approach can be called the outstanding shares method whereby one has to simply multiply the number of shares outstanding by the market price per share and add a premium.
- (b) To make the changes lasting, Kurt Lewin proposed three phases of the change process for moving the organisation from the present to the future. These stages are: **unfreezing, changing and refreezing.**
- (i) **Unfreezing the situation:** Unfreezing is the process of breaking down the old attitudes and behaviours, customs and traditions so that they start with a clean slate. This can be achieved by making announcements, holding meetings and promoting the ideas throughout the organization.
- (ii) **Changing to new situation:** Once the unfreezing process has been completed, members' behaviour patterns need to be redefined. This can be done through compliance (i.e. enforcing behaviour through rewards and punishment), identification (i.e. psychologically impressing people to identify with new patterns) and internalisation (i.e. changing the thought processes of individuals to adjust to the new environment)
- (iii) **Refreezing:** Refreezing occurs when the new behaviour becomes a normal way of life replacing the former behaviour completely for successful and permanent change to take place.

Change process is not a onetime application but a continuous process due to dynamism and ever changing environment. The process of unfreezing, changing and refreezing is a cyclical one and remains continuously in action. By the change management process, organizations can better manage the required strategic change. In the given scenario, ABC Ltd may:

- Create awareness on compelling reasons for change.
- Steer the organization on the desired path with wide acceptance.
- Implement and install the necessary changes in the desired manner for the overall benefit of the organisation.
- Aim to stabilize the operation at a higher level of performance.

Question 12

- (a) *What is Benchmarking? What are the elements involved in Benchmarking process?*

(1 + 3 = 4 Marks)

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

(b) *How a corporate culture can be both strength and weakness of an organisation?* (3 Marks)

Answer

- (a) Benchmarking is an approach of setting goals and measuring productivity based on best industry practices. It is developed out of need to have information against which performance can be measured. Benchmarking helps businesses in improving performance by learning from the best practices and the processes by which they are achieved. Thus Benchmarking is the process of continuous improvement in search of competitive advantage. It measures company's products, services and practices against those of its competitors or other acknowledged leaders in the industry.

The Benchmarking process elements: Some of the common elements of benchmarking process are as under.

- (i) **Identifying the need for benchmarking process:** This step will define the objectives of the benchmarking exercise. It will also involve selecting the type of benchmarking. Organisations identify realistic opportunities for improvements.
 - (ii) **Clearly understanding existing business processes:** This will involve compiling information and data on performance. This will include mapping processes also. Information and data is collected by different methods for example, interviews, visits and filling of questionnaires.
 - (iii) **Identify best processes:** Within the selected framework best processes are identified. These may be within the same organisation or outside of them.
 - (iv) **Comparison of own processes and performance with that of others:** Benchmarking process also involves comparison of performance of the organisation with performance of other organisation. Any deviation between the two is analysed to make further improvements.
 - (v) **Prepare a report and implement the steps necessary to close the gap in performance:** A report on benchmarking initiatives containing recommendations is prepared. Such report also contains the action plans for implementation.
 - (vi) **Evaluation:** Business organisations evaluate the results of benchmarking process in terms of improvements vis-à-vis objectives and other criteria set for the purpose. It also periodically evaluates and reset the benchmarks in the light of changes in the conditions that influence the performance.
- (b) The most important phenomenon which often distinguishes one organisation with another is its corporate culture. Corporate culture refers to a Company's values, beliefs, business principles, traditions, and ways of operating and internal work environment. Every corporation has a culture that exerts powerful influences on the behaviour of managers.

As a Strength: Culture can facilitate communication, decision making and control and instil cooperation and commitment. An organization's culture could be strong and cohesive when it conducts its business according to clear and explicit set of principle and

INTEGRATED PROFESSIONAL COMPETENCE EXAMINATION : MAY, 2011

values, which the management devotes considerable time to communicating to employees and which values are shared widely across the organisation.

As a weakness: Culture, as a weakness can obstruct the smooth implementation of strategy by creating resistance to change. An organization's culture could be characterised as weak when many sub-cultures exists, few values and behavioural norms are shared and traditions are rare. In such organizations, employees do not have a sense of commitment, loyalty and sense of identity.

Question 13

Distinguish between the following:

- (a) *Strategy Formulation and Strategy Implementation.* (4 Marks)
(b) *TQM and Traditional Management Practices.* (3 Marks)

Answer

- (a) Strategy formulation and implementation can be distinguished in the following ways:

Strategy Formulation	Strategy Implementation
- It involves the design and choice of appropriate organisational strategies.	- It is the process of putting the various strategies into action of organizations.
- It is positioning forces before the action.	- It is managing forces during the action
- It focuses on effectiveness.	- It focuses on efficiency.
- It is primarily an intellectual process.	- It is primarily an operational process.
- It requires good intuitive and analytical skills.	- It requires special motivation and leadership skills.
- It requires coordination among a few individuals.	- It requires coordination among many individuals.

- (b) Total Quality Management is different from traditional management practices, requiring changes in organisational processes, beliefs and attitudes, and behaviours. 'Traditional management' means the way things are usually done in most organisations in the absence of a TQM focus. The nature of TQM differs from common management practices in many respects. Some of the key differences are as follows:
- (i) **Strategic Planning and Management:** Quality planning and strategic business planning is indistinguishable in TQM. Customer satisfaction, defect rates and process cycle times receive very high attention on TQM which is not the case in traditional management.
- (ii) **Changing Relationships with customers and suppliers:** Distinguishable, innovation is essential to meet and exceed customers' needs. In TQM quality is

PAPER – 7 : INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

defined as product and services. Traditional management places customers outside of the enterprises and within the domain of marketing and sales.

- (iii) **Organizational Structure:** TQM is also distinguishable as it views enterprise as a system of interdependent processes. Every process contains sub-processes and is also contained within a higher process.
- (iv) **Organizational Change:** In TQM the environment in which the enterprise interacts is considered to be changing constantly. Management's job, therefore, is to provide the leadership for continual improvement and innovation in processes and systems, products, and services. TQM recognises the inevitability of external change and focuses on shaping the future.
- (v) **Teamwork:** In TQM, individuals cooperate in team structure such as quality circles, steering committees, and self-directed work teams. Departments work together toward system optimization through cross-functional teamwork.
- (vi) **Motivation and Job Design:** TQM managers provide leadership and motivation rather than overt intervention in the processes of their subordinates who are viewed as process managers rather than functional specialists.

Question 14

Write short note on the following:

- (a) *Importance of Strategic Management.* (4 Marks)
- (b) *Advantages of SBU Structure.* (3 Marks)

Answer

- (a) **Importance of Strategic Management:** Strategic Management is very important for the survival and growth of business organizations in dynamic business environment. Other major benefits of strategic management are as follows:
 - Strategic management helps organizations to be more proactive rather than reactive in dealing with its future. It facilitates to work within vagaries of environment and remains adaptable with the turbulence or uncertain future. Therefore, they are able to control their own destiny in a better way.
 - It provides better guidance to entire organization on the crucial point – what it is trying to do. Also provides framework for all major business decisions of an enterprise such a decision on businesses, products, markets, organization structures, etc.
 - It facilitates to prepare the organization to face the future and act as pathfinder to various business opportunities. Organizations are able to identify the available opportunities and identify ways and means as how to reach them.
 - It serves as a corporate defence mechanism against mistakes and pitfalls. It helps

organizations to avoid costly mistakes in product market choices or investments.

- Over a period of time strategic management helps organization to evolve certain core competencies and competitive advantages that assist in the fight for survival and growth.

(b) Advantage of SBU Structure: SBU is any part of a business organization which is treated separately for strategic management purposes. The concept of SBU is helpful in creating an SBU organizational structure. It is discrete element of the business serving product markets with readily identifiable competitors and for which strategic planning can be concluded. It is created by adding another level of management in a divisional structure after the divisions have been grouped under a divisional top management authority based on the common strategic interests.

Its Advantages are:

- Establishing coordination between divisions having common strategic interests.
- Facilitates strategic management and control on large and diverse organizations.
- Fixes accountabilities at the level of distinct business units.
- Allows strategic planning to be done at the most relevant level within the total enterprise.
- Makes the task of strategic review by top executives more objective and more effective.
- Helps allocate corporate resources to areas with greatest growth opportunities.