

(GI-5+7, GI-6, GI-8, GI-9, SI-2+4, SI-3 & VI-2)

DATE: 19.09.2019 MAXIMUM MARKS: 100

TIMING: 3¼ Hours

EIS& SM

SECTION – A : ENTERPRISE INFORMATION SYSTEMS AND MANAGEMENT

Q. No. 1 & 2 is Compulsory,

Answer any three questions from the remaining four questions

Answer 1:

1. Ans. c
 2. Ans. d
 3. Ans. b
 4. Ans. b
 5. Ans. a
 6. Ans. c
 7. Ans. c
 8. Ans. d
 9. Ans. b
 10. Ans. c
 11. Ans. b
 12. Ans. d
 13. Ans. c
 14. Ans. a
 15. Ans. a
- {1 M each}

Answer 2:

The business processes and standards adapted by Banks should consider these new set of IT risks and challenges:

- (i) **Frequent changes or obsolescence of technology:** Technology keeps on evolving and changing constantly and becomes obsolete very quickly. Hence, there is always a risk that the investment in technology solutions unless properly planned may result in loss to bank due to risk of obsolescence.
- (ii) **Multiplicity and complexity of systems:** The core of banking services remain same but by using technology the way these banking products and services are provided changes drastically. The Technology architecture used for services could include multiple digital platforms and is quite complex. Hence, this requires the bank personnel to have personnel with requisite technology skills or the management of the bank's technology could be outsourced to a company having the relevant skill set.
- (iii) **Different types of controls for different types of technologies/ systems:** Deployment of Technology gives rise to new types of risks which are explained later in this chapter. These risks need to be mitigated by relevant controls as applicable to the technology/information systems deployed in the bank.

{1 M for any 5 point}

- (iv) **Proper alignment with business objectives and legal/ regulatory requirements** : Banks must ensure that the CBS and allied systems implemented, cater to all the business objectives and needs of the bank, in addition to the legal/regulatory requirements envisaged.
- (v) **Dependence on vendors due to outsourcing of IT services**: In a CBS environment, the bank requires staff with specialized domain skills to manage IT deployed by the bank. Hence, these services could be outsourced to vendors and there is heavy dependency on vendors and gives rise to vendor risks which should be managed by proper contracts, controls and monitoring.
- (vi) **Vendor related concentration risk**: There may not one but multiple vendors providing different services. For example, network, hardware, system software and banking software services may be provided by different vendors or these services may be provided by a single vendor. Both these situations result in higher risks due to heavy dependence on vendors.
- (vii) **Segregation of Duties (SoD)**: Banks have a highly-defined organization structure with clearly defined roles, authority and responsibility. The segregation of duties as per organization structure should be clearly mapped in the CBS used by the bank. This is a high-risk area since any SoD conflicts can be a potential vulnerability for fraudulent activities. For example, if a single employee can initiate, authorize and disburse a loan the possibility of misuse cannot be ignored.
- (viii) **External threats leading to cyber frauds/ crime**: The CBS environment provides access to customers anytime, anywhere using internet. Hence, information system which was earlier accessible only within and to the employees of the bank is now exposed as it is open to be accessed by anyone from anywhere. Making the information available is business imperative but this is also fraught with risks of increased threats from hackers and others who could access the software to commit frauds/crime.
- (ix) **Higher impact due to intentional or unintentional acts of internal employees**: Employees in a technology environment are the weakest link in an enterprise. This is much more relevant in bank as banks deal directly with money. Hence, the employee acts done intentionally or unintentionally may compromise security of the IT environment.
- (x) **New social engineering techniques employed to acquire confidential credentials**: Fraudsters use new social engineering techniques such as socializing with employees and extracting information which is used unauthorizedly to commit frauds. For example: extracting information about passwords from bank's staff acting as genuine customer and using it to commit frauds.
- (xi) **Need for governance processes to adequately manage technology and information security**: Controls in CBS should be implemented from macro and business perspective and not just from function and technology perspective. As Technology, has become key enabler for bank and is implemented across the bank, senior management of bank should be involved in directing how technology is deployed in bank and approve appropriate policies. This requires governance process to implement security as required.
- (xii) **Need to ensure continuity of business processes in the event of major exigencies**: The high dependence on technology makes it imperative to ensure resilience to ensure that failure does not impact banking services. Hence, a documented business continuity plan with adequate technology and information systems should be planned, implemented and monitored.

Answer 3:

(a) Some of the new methods of Digital Payments are as follows:

- Unified Payment Interface (UPI) Apps
- Immediate Payment Service (IMPS)
- BHIM (Bharat Interface for Money) - Mobile App
- Mobile Wallets
- Aadhar Enabled Payment Service(AEPS)
- Unstructured Supplementary Service Data (USSD)
- The explanation of these Digital

Payments is as follows:

- (i) **Unified Payment Interface (UPI):** UPI is a payment mode which is used to make fund transfers through the mobile app. UPI App is a system that powers multiple bank accounts of participating banks, several banking services features like fund transfer, and merchant payments in a single mobile application. User can transfer funds between two accounts using UPI Apps. User must register for mobile banking to use UPI apps.
- (ii) **Immediate Payment Service (IMPS):** It is an instant interbank electronic fund transfer service through mobile phones. It is also being extended through other channels such as ATM, Internet Banking, etc.
- (iii) **Mobile Apps:** BHIM (Bharat Interface for Money) is a Mobile App developed by National Payments Corporation of India (NPCI) based on UPI (Unified Payment Interface). It facilitates e-payments directly through banks and supports all Indian banks which use that platform. It is built on the Immediate Payment Service infrastructure and allows the user to instantly transfer money between the bank accounts of any two parties. BHIM works on all mobile devices and enables users to send or receive money to other UPI payment addresses.
- (iv) **Mobile Wallets:** It is defined as Virtual wallets that stores payment card information on a mobile device. Mobile Wallets provide a convenient way for a user to make-in- store payments and can be used that merchants listed with the mobile wallet service providers. There are mobile wallets like Paytm, Freecharge, Buddy, Mobikwik etc. Some of these are owned by banks and some are owned by private companies.
- (v) **Aadhar Enabled Payment Service(AEPS):** AEPS is an Aadhaar based digital payment mode. Customer needs only his or her Aadhaar number to pay to any merchant. AEPS allows bank to bank transactions which means the money that you pay will be deducted from your account and credited to the payee's account directly. Customers will need to link their AADHAR numbers to their bank accounts. APES once launched can be used at POS terminals also.
- (vi) **Unstructured Supplementary Service Data(USSD):** A revolutionary idea, where to make payments through mobiles there is neither need for internet nor any smart phone. USSD banking or *99# Banking is a mobile banking based digital payment mode. User does not need to have a smartphone or internet connection to use USSD banking. S/he can easily use it with any normal feature phone. USSD banking is as easy as checking of mobile balance. S/he can use this service for many financial and non-financial operations such as checking balance, sending money, changing Mobile Banking Personal Identification number (MPIN) and getting Mobile Money Identifier (MMID).

(1 M
each 6
point)

Answer:**(b) Database Controls**

Protecting the integrity of a database when application software acts as an interface to interact between the user and the database, are called **Update Controls** and **Report Controls**.

Major **Update Controls** are as follows:

- ♦ **Sequence Check between Transaction and Master Files:** Synchronization and the correct sequence of processing between the master file and transaction file is critical to maintain the integrity of updating, insertion or deletion of records in the master file with respect to the transaction records. If errors, in this stage are overlooked, it leads to corruption of the critical data.
- ♦ **Ensure All Records on Files are processed:** While processing, the transaction file records mapped to the respective master file, and the end-of-file of the transaction file with respect to the end-of-file of the master file is to be ensured.
- ♦ **Process multiple transactions for a single record in the correct order:** Multiple transactions can occur based on a single master record (e.g. dispatch of a product to different distribution centers). Here, the order in which transactions are processed against the product master record must be done based on a sorted transaction codes.
- ♦ **Maintain a suspense account:** When mapping between the master record to transaction record results in a mismatch due to failure in the corresponding record entry in the master record; then these transactions are maintained in a suspense account. A non-zero balance of the suspense accounts reflects the errors to be corrected.

Major **Report Controls** are as follows:

- **Standing Data:** Application programs use many internal tables to perform various functions like gross pay calculation, billing calculation based on a price table, bank interest calculation etc. Maintaining integrity of the pay rate table, price table and interest table is critical within an organization. Any changes or errors in these tables would have an adverse effect on the organizations basic functions. Periodic monitoring of these internal tables by means of manual check or by calculating a control total is mandatory.
- **Print-Run-to Run control Totals:** Run-to-Run control totals help in identifying errors or irregularities like record dropped erroneously from a transaction file, wrong sequence of updating or the application software processing errors.
- **Print Suspense Account Entries:** Similar to the update controls, the suspense account entries are to be periodically monitors with the respective error file and action taken on time.
- **Existence/Recovery Controls:** The back-up and recovery strategies together encompass the controls required to restore failure in a database. Backup strategies are implemented using prior version and logs of transactions or changes to the database. Recovery strategies involve roll-forward (current state database from a previous version) or the roll-back (previous state database from the current version) methods.

(1 M
each 4
point)

Answer 4:

- (a)** An ideal ERP System where a single database is being utilized and contains all data for various software modules includes the following modules:

- ◆ **Manufacturing:** Some of the functions include engineering, capacity, workflow management, quality control, bills of material, manufacturing process, etc.
- ◆ **Financials:** Accounts payable, accounts receivable, fixed assets, general ledger and cash management, etc.
- ◆ **Human Resources:** Benefits, training, payroll, time and attendance, etc.
- ◆ **Supply Chain Management:** Inventory, supply chain planning, supplier scheduling, claim processing, order entry, purchasing, etc.
- ◆ **Projects:** Costing, billing, activity management, time and expense, etc.
- ◆ **Customer Relationship Management (CRM):** CRM is a term applied to processes implemented by a company to handle its contact with its customers. CRM software is used to support these processes, storing information on current and prospective customers. Information in the system can be accessed and entered by employees in different departments, such as sales, marketing, customer service, training, professional development, performance management, human resource development and compensation.
- ◆ **Data Warehouse:** Usually this is a module that can be accessed by an organization's customers, suppliers and employees. Data warehouse is a repository of an organization's electronically stored data. These are designed to facilitate reporting and analysis, to retrieve and analyse data; tools to extract, transform and load data into the repository; and to manage the data dictionary.

(1 M for
any 6
point)

Answer:

(b) Various types of Asynchronous Attacks on data are as follows:

- **Data Leakage:** This involves leaking information out of the computer by means of dumping files to paper or stealing computer reports and tape.
- **Subversive Attacks:** These can provide intruders with important information about messages being transmitted and the intruder may attempt to violate the integrity of some components in the subsystem.
- **Wire-tapping:** This involves spying on information being transmitted over telecommunication network.
- **Piggybacking:** This is the act of following an authorized person through a secured door or electronically attaching to an authorized telecommunication link that intercepts and alters transmissions. This involves intercepting communication between the operating system and the user and modifying them or substituting new messages.

(1 M
each 4
point)

Answer 5:

(a) As an Information Systems (IS) Auditor, various Audit Tools that can be used to perform IS Auditing are as follows:

- (i) **Snapshots:** Tracing a transaction in a computerized system can be performed with the help of snapshots or extended records. The snapshot software is built into the system at those points where material processing occurs which takes images of the flow of any transaction as it moves through the application. These images can be utilized to assess the authenticity, accuracy, and completeness of the processing carried out on the transaction. The main areas to dwell upon while involving such a system are to locate the snapshot points based on materiality of transactions when the snapshot will be captured and the reporting system design and implementation to present data in a meaningful way.

{2 M}

- (ii) **Integrated Test Facility (ITF):** The ITF technique involves the creation of a dummy entity in the application system files and the processing of audit test data against the entity as a means of verifying processing authenticity, accuracy, and completeness. This test data would be included with the normal production data used as input to the application system. In such cases, the auditor must decide what would be the method to be used to enter test data and the methodology for removal of the effects of the ITF transactions. {1 M}
- (iii) **System Control Audit Review File (SCARF):** The SCARF technique involves embedding audit software modules within a host application system to provide continuous monitoring of the system’s transactions. The information collected is written onto a special audit file- the SCARF master files. Auditors then examine the information contained on this file to see if some aspect of the application system needs follow-up. In many ways, the SCARF technique is like the snapshot technique along with other data collection capabilities. {1 M}
- (iv) **Continuous and Intermittent Simulation (CIS):** This is a variation of the SCARF continuous audit technique. This technique can be used to trap exceptions whenever the application system uses a database management system. The advantage of CIS is that it does not require modifications to the application system and yet provides an online auditing capability. {1 M}
- (v) **Audit Hooks:** There are audit routines that flag suspicious transactions. For example, internal auditors at Insurance Company determined that their policyholder system was vulnerable to fraud every time a policyholder changed his or her name or address and then subsequently withdrew funds from the policy. They devised a system of audit hooks to tag records with a name or address change. The internal audit department will investigate these tagged records for detecting fraud. When audit hooks are employed, auditors can be informed of questionable transactions as soon as they occur. This approach of real-time notification displays a message on the auditor’s terminal. {1 M}

Answer:

(b) The major benefits that will be drawn out of automating the Grievance related business process and implementing the Grievance Management System are as follows:

- **Quality and Consistency:** Ensures that every action is performed identically - resulting in high quality, reliable results and stakeholders will consistently experience the same level of service.
 - **Time Saving:** Automation reduces the number of tasks employees would otherwise need to do manually. It frees up time to work on items that add genuine value to the business, allowing innovation and increasing employees’ levels of motivation.
 - **Visibility:** Automated processes are controlled and consistently operate accurately within the defined timeline. It gives visibility of the process status to the organization.
 - **Improved Operational Efficiency:** Automation reduces the time it takes to achieve a task, the effort required to undertake it and the cost of completing it successfully. Automation not only ensures systems run smoothly and efficiently, but that errors are eliminated and that best practices are constantly leveraged.
- {1 M for any 4 point}

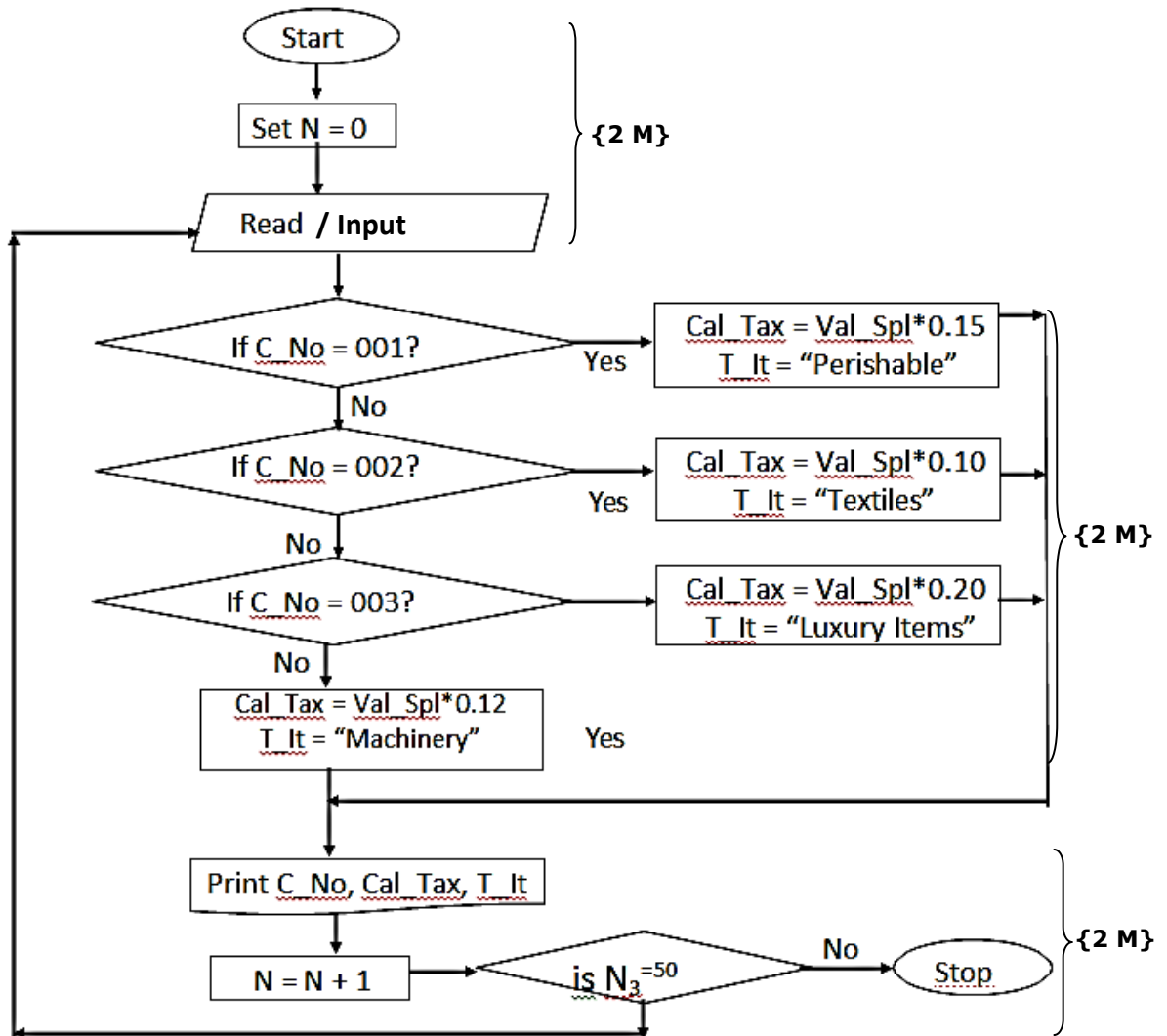
- **Governance and Reliability:** The consistency of automated processes means stakeholders can rely on business processes to operate and offer reliable processes to customers, maintaining a competitive advantage.
- **Reduced Turnaround Times:** Eliminate unnecessary tasks and realign process steps to optimize the flow of information throughout production, service, billing and collection. This adjustment of processes distills operational performance and reduces the turnaround times for both staff and external customers.
- **Reduced Costs:** Manual tasks, given that they are performed one-at-a-time and at a slower rate than an automated task, will cost more. Automation allows us to accomplish more by utilizing fewer resources.

Answer 6:

(a) The variables are defined as follows:

C = Code No; Val_Spl = Value of Supply;
 T_It = Types of Item N = Counter; Cal_Tax = Calculated Tax after GST

The required flowchart is as below:



Answer:

(b) Risk is possibility of loss. The same may be result of intentional or un-intentional action by individuals. Risks associated with e-commerce transactions are high compared to general internet activities. These include the following:

- (i) **Privacy and Security:** Comes in the point of hacking. There are often issues of security and privacy due to lack of personalized digital access and knowledge.
- (ii) **Quality issues:** There are quality issues raised by customers as the original product differs from the one that was ordered.
- (iii) **Delay in goods and Hidden Costs:** When goods are ordered from another country, there are hidden costs enforced by Companies.
- (iv) **Needs Access to internet and lack of personal touch:** The e commerce requires an internet connection which is extra expensive and lacks personal touch.
- (v) **Security and credit card issues:** There is cloning possible of credit cards and debit cards which poses a security threat.
- (vi) **Infrastructure:** There is a greater need of not only digital infrastructure but also network expansion of roads and railways which remains a substantial challenge in developing countries.
- (vii) **Problem of anonymity:** There is need to identify and authenticate users in the virtual global market where anyone can sell to or buy from anyone, anything from anywhere.
- (viii) **Repudiation of contract:** There is possibility that the electronic transaction in the form of contract, sale order or purchase by the trading partner or customer maybe denied.
- (ix) **Lack of authenticity of transactions:** The electronic documents that are produced during an e-Commerce transaction may not be authentic and reliable.
- (x) **Data Loss or theft or duplication:** The data transmitted over the Internet may be lost, duplicated, tampered with or replayed.
- (xi) **Attack from hackers:** Web servers used for e-Commerce maybe vulnerable to hackers.
- (xii) **Denial of Service:** Service to customers may be denied due to non-availability of system as it may be affected by viruses, e-mail bombs and floods.
- (xiii) **Non-recognition of electronic transactions:** e-Commerce transactions, as electronic records and digital signatures may not be recognized as evidence in courts of law.
- (xiv) **Lack of audit trails:** Audit trails in e-Commerce system may be lacking and the logs may be incomplete, too voluminous or easily tampered with.
- (xv) **Problem of piracy:** Intellectual property may not be adequately protected when such property is transacted through e-Commerce.

(1 M for any 4 point)

SECTION – B : STRATEGIC MANAGEMENT

Q. No. 7&8 is Compulsory,

Answer any three questions from the remaining four questions

Answer 7:

- | | | |
|-----|--------|--------------|
| 1. | Ans. b | } {1 M Each} |
| 2. | Ans. a | |
| 3. | Ans. d | |
| 4. | Ans. c | |
| 5. | Ans. b | |
| 6. | Ans. d | |
| 7. | Ans. a | |
| 8. | Ans. a | |
| 9. | Ans. b | |
| 10. | Ans. c | |
| 11. | Ans. a | |
| 12. | Ans. d | |
| 13. | Ans. c | |
| 14. | Ans. a | |
| 15. | Ans. a | |

Answer 8:

Organizations can be classified as commercial and non-commercial on the basis of the interest they have. typically, a government or medical organization may function without any commercial objectives. A commercial organization has profit as its main aim. We can find many organizations around us, which do not have any commercial objective of making profits. their genesis may be for social, charitable, or educational purposes. } {1 M}

The strategic-management process is being used effectively by countless non-profit governmental organizations. Many non-profit and governmental organizations outperform private firms and corporations on innovativeness, motivation, productivity, and human resource. } {3 M}

Compared to for-profit firms, non-profit and governmental organizations often function as a monopoly, produce a product or service that offers little or no measurability of performance, and are totally dependent on outside financing. especially for these organizations, strategic management provides an excellent vehicle for developing and justifying requests for needed financial support. } {1 M}

Answer 9:

- (a) Experience curve is similar to learning curve which explains the efficiency gained by workers through repetitive productive work. Experience curve is based on the commonly observed phenomenon that unit costs decline as a firm accumulates experience in terms of a cumulative volume of production. The implication is that larger firms in an industry would tend to have lower unit costs as compared to those of smaller organizations, thereby gaining a competitive cost advantage. Experience curve results from a variety of factors such as learning effects, economies of scale, product redesign and technological improvements in production. } {3 M}
- The concept of experience curve is relevant for a number of areas in strategic management. For instance, experience curve is considered a barrier for new firms contemplating entry in an industry. It is also used to build market share and discourage competition. } {2 M}

Answer:

(b) The management of internal linkages in the value chain could create competitive advantage in a number of ways:

- ♦ There may be important linkages between the primary activities. For example, a decision to hold high levels of finished stock might ease production scheduling problems and provide for a faster response time to the customer. However, an assessment needs to be made whether the value added to the customer by this faster response through holding stocks is greater than the added cost. } {2 M}
- ♦ It is easy to miss this issue of managing linkages between primary activities in an analysis if, for example, the organization’s competences in marketing activities and operations are assessed separately. The operations may look good because they are geared to high-volume, low-variety, low-unit-cost of production. However, at the same time, the marketing team may be selling speed, flexibility and variety to the customers. So competence in separate activities need to be compatible. } {2 M}
- ♦ The management of the linkages between a primary activity and a support activity may be the basis of a core competence. It may be key investments in systems or infrastructure which provides the basis on which the company outperforms competition. Computer-based systems have been exploited in many different types of service organization and have fundamentally transformed the customer experience. } {1 M}
- ♦ Linkages between different support activities may also be the basis of core competences. For example, the extent to which human resource development is in tune with new technologies has been a key feature in the implementation of new production and office technologies. Many companies have failed to become competent in managing this linkage properly and have lost out competitively. } {1 M}

Answer 10:

(a) Mission statement is an answer to the question “Who we are and what we do” and hence has to focus on the organisation’s present capabilities, focus activities and business makeup. An organisation’s mission states what customers it serves, what need it satisfies, and what type of product it offers. It is an expression of the growth ambition of the organisation.
 A company’s mission statement is typically focused on its present business scope- “who we are and what we do”; mission statements broadly describe an organizations present capabilities, customer focus activities and business makeup.
 The following points must be considered while writing a mission statement of a company. } {2 M}

- (i) To establish the special identity of the business - one that typically distinct it from other similarly positioned companies. } {1 Mark for each valid point} (Max. 03 Marks}
- (ii) Needs which business tries to satisfy, customer groups it wishes to target and the technologies and competencies it uses and the activities it performs.
- (iii) Good mission statements should be unique to the organisation for which they are developed.
- (iv) The mission of a company should not be to make profit. Surpluses may be required for survival and growth, but cannot be mission of a company.

Answer:

- (b) Divestment Strategy: Divestment strategy involves the sale or liquidation of a portion of business, or a major division, profit center or SBU. Divestment is usually a part of rehabilitation or restructuring plan and is adopted when a turnaround has been attempted but has proved to be unsuccessful. The option of a turnaround may even be ignored if it is obvious that divestment is the only answer. {2^{1/2}M}
- Liquidation Strategy: Liquidation as a form of retrenchment strategy is considered as the most extreme and unattractive. It involves closing down a firm and selling its assets. It is considered as the last resort because it leads to serious consequences such as loss of employment for workers and other employees, termination of opportunities a firm could pursue, and the stigma of failure. {2^{1/2}M}

Answer 11:

- (a) To gain a deep understanding of a company's industry and competitive environment, managers do not need to gather all the information they can find and waste a lot of time digesting it. Rather, the task is much more focused. A powerful and widely used tool for systematically diagnosing the significant competitive pressures in a market and assessing the strength and importance of each is the Porter's five-forces model of competition. This model holds that the state of competition in an industry is a composite of competitive pressures operating in five areas of the overall market:
- Competitive pressures associated with the market manoeuvring and jockeying for buyer patronage that goes on among rival sellers in the industry.
 - Competitive pressures associated with the threat of new entrants into the market.
 - Competitive pressures coming from the attempts of companies in other industries to win buyers over to their own substitute products.
 - Competitive pressures stemming from supplier bargaining power and supplier-seller collaboration.
 - Competitive pressures stemming from buyer bargaining power and seller-buyer Collaboration.
- {1 Marks for each valid point}

Answer:

- (b) Production System is concerned with the capacity, location, layout, product or service design, work systems, degree of automation, extent of vertical integration, and such factors. Strategies related to production system are significant as they deal with vital issues affecting the capability of the organisation to achieve its objectives. {2^{1/2}M}
- Strategy implementation would have to take into account the production system factors as they involve decisions which are long-term in nature and influence not only the operations capability of an organisation but also its ability to implement strategies and achieve objectives. {2^{1/2}M}

Answer 12:

- (a) A culture where creativity, embracing change, and challenging the status quo are pervasive is very conducive to successful execution of a product innovation and technological leadership strategy. A culture built around such business principles as listening to customers, encouraging employees to take pride in their work, and giving employees a high degree of decision-making responsibility is very conducive to successful execution of a strategy of delivering superior customer service. {2^{1/2}M}
- A strong strategy-supportive culture nurtures and motivates people to do their jobs in ways conducive to effective strategy execution; it provides structure, standards, and a value system in which to operate; and it promotes strong employee identification with the company's vision, performance targets, and strategy. All this makes employees feel genuinely better about their jobs and work environment and {2^{1/2}M}

the merits of what the company is trying to accomplish. Employees are stimulated to take on the challenge of realizing the company's vision, do their jobs competently and with enthusiasm, and collaborate with others as needed to bring the strategy to success.

Answer:

- (b) The changes in the environmental forces often require businesses to make modifications in their existing strategies and bring out new strategies. Strategic change is a complex process and it involves a corporate strategy focused on new markets, products, services and new ways of doing business. To make the change lasting, Kurt Lewin proposed three phases of the change process for moving the organization from the present to the future. These stages are unfreezing, changing and refreezing. {1 M}
- (a) **Unfreezing the situation:** The process of unfreezing simply makes the individuals or organizations aware of the necessity for change and prepares them for such a change. Lewin proposes that the changes should not come as a surprise to the members of the organization. Sudden and unannounced change would be socially destructive and morale lowering. The management must pave the way for the change by first "unfreezing the situation", so that members would be willing and ready to accept the change. 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. {1 M}
- (b) **Changing to New situation:** Once the unfreezing process has been completed and the members of the organization recognise the need for change and have been fully prepared to accept such change, their behaviour patterns need to be redefined. H.C. Kellman has proposed three methods for reassigning new patterns of behaviour. These are compliance, identification and internalisation. {2 M}
- ♦ **Compliance:** It is achieved by strictly enforcing the reward and punishment strategy for good or bad behaviour. Fear of punishment, actual punishment or actual reward seems to change behaviour for the better.
 - ♦ **Identification:** Identification occurs when members are psychologically impressed upon to identify themselves with some given role models whose behaviour they would like to adopt and try to become like them.
 - ♦ **Internalization:** Internalization involves some internal changing of the individual's thought processes in order to adjust to a new environment. They have given freedom to learn and adopt new behaviour in order to succeed in the new set of circumstances.
- (c) **Refreezing:** Refreezing occurs when the new behaviour becomes a normal way of life. The new behaviour must replace the former behaviour completely for successful and permanent change to take place. In order for the new behaviour to become permanent, it must be continuously reinforced so that this newly acquired behaviour does not diminish or extinguish. Change process is not a one time 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. {1M}
