SECTION A

1.

(a)

(c) **Internet of Things (IoT):** IoT is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. For example: Washing machines with Wi-Fi networking capabilities can connect themselves to home Wi-Fi. Once these machines are so connected, they can be controlled through machine manufacturer mobile app from anywhere in the world.

(b)

(iv) **Payment Gateway:** It defines the payment mode through which customers shall make payments. Payment gateway represents the way e-commerce / m-commerce vendors collects their payments. The payment gateway is another critical component of e-commerce set up. These are the last and most critical part of e-commerce transactions. These assures seller of receipt of payment from buyer of goods / services from e-commerce vendors. Presently numerous methods of payments by buyers to sellers are being used including Credit / Debit Card Payments, Online bank payments, Vendors own payment wallet, Third Party Payment wallets, like SBI BUDDY or PAYTM, Cash on Delivery (COD) and Unified Payments Interface (UPI).

(c)

(b) **Line Error Control:** Whenever data is transmitted over a communication line in a telecommunication network, an error may occur because of attenuation distortion or noise that occurs on the line. These line errors must be detected and corrected.

- **Error Detection:** The errors can be detected by either using a loop (echo) check or building some form of redundancy into the message transmitted.
- **Error Correction:** When line errors have been detected, they must then be corrected using either forward error correcting codes or backward error correcting codes.

(d)

(v) **Proxy Server:** A Proxy Server is a computer that offers a computer network service to allow clients to make indirect network connections to other network services. A client connects to the proxy server, and then requests a connection, file, or other resource available on a different server. The proxy provides the resource either by connecting to the specified server or by serving it from a cache. In some cases, the proxy may alter the client's request or the server's response for various purposes.

(e)

(a) **Business Intelligence (BI):** Business Intelligence (BI) is a technology-driven process for analyzing data and presenting actionable information to help corporate executives, business managers and other end users make more informed business decisions. BI encompasses a wide variety of tools, applications and methodologies that enable organizations to collect data from internal systems and external sources, prepare it for analysis, develop and run queries against the data, and create reports, dashboards and data visualizations to make the analytical results available to corporate decision makers as well as operational workers.

The potential benefits of business intelligence programs include accelerating and improving decision making; optimizing internal business processes; increasing operational efficiency; driving new revenues; and gaining competitive advantages over business rivals. BI systems can also help companies identify market trends and spot business problems that need to be addressed.

2.

(a)

6. The controls per the time that they act, relative to a security incident can be classified as under:

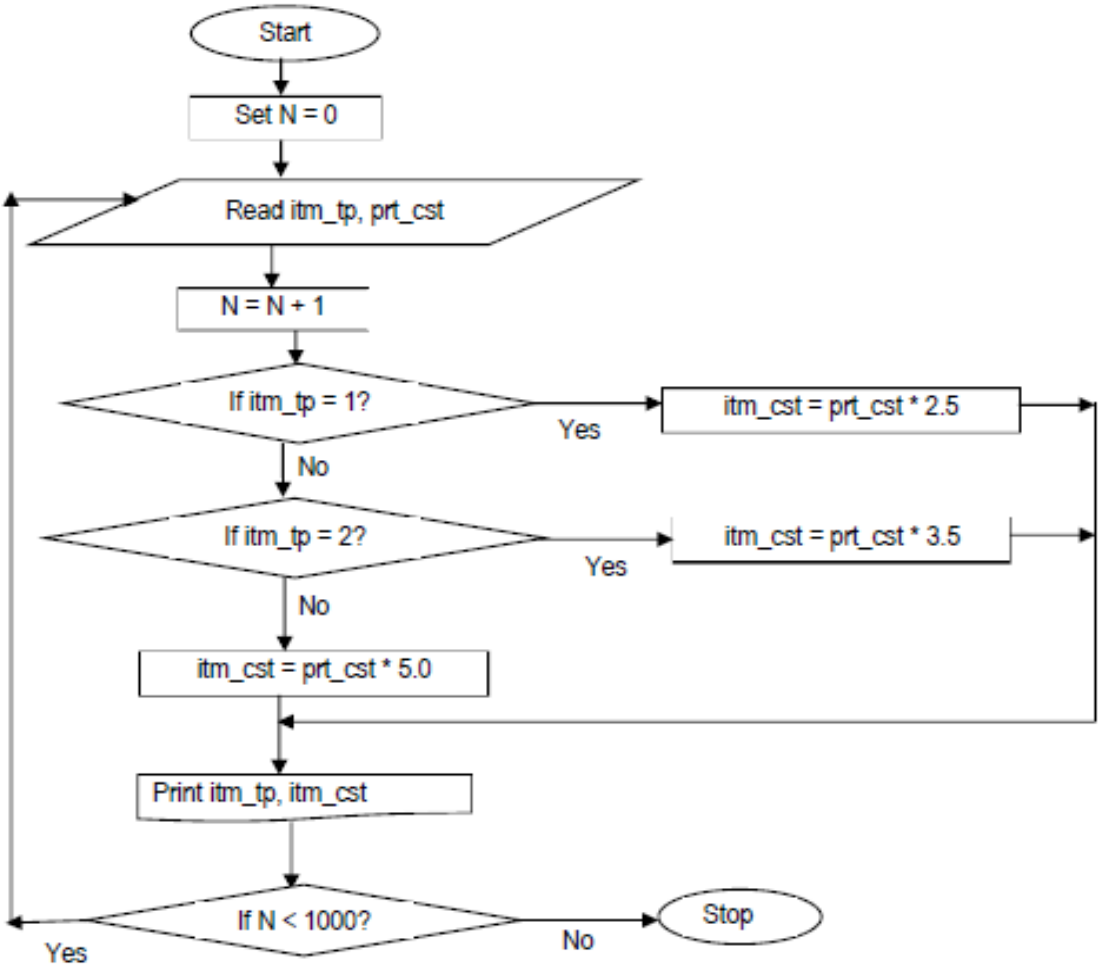
- **Preventive Controls**: These controls prevent errors, omissions, or security incidents from occurring. Examples include simple data-entry edits that block alphabetic characters from being entered in numeric fields, access controls that protect sensitive data/ system resources from unauthorized people, and complex and dynamic technical controls such as anti-virus software, firewalls, and intrusion prevention systems. Some examples of preventive controls can be Employing qualified personnel; Segregation of duties; Access control; Vaccination against diseases; Documentation; Prescribing appropriate books for a course; Training and retraining of staff; Authorization of transaction; Validation, edit checks in the application; Firewalls; Anti-virus software (sometimes this acts like a corrective control also), etc., and Passwords. The above list contains both of manual and computerized, preventive controls.
- **Detective Controls**: These controls are designed to detect errors, omissions or malicious acts that occur and report the occurrence. In other words, Detective Controls detect errors or incidents that elude preventive controls. Detective controls can also include monitoring and analysis to uncover activities or events that exceed authorized limits or violate known patterns in data that may indicate improper manipulation. Some examples of Detective Controls are Cash counts; Bank reconciliation; Review of payroll reports; Compare transactions on reports to source documents; Monitor actual expenditures against budget; Use of automatic expenditure profiling where management gets regular reports of spend to date against profiled spend; Hash totals; Check points in production jobs; Echo control in telecommunications; Duplicate checking of calculations; Past-due accounts report; The internal audit functions; Intrusion Detection System; Cash counts and bank reconciliation, and Monitoring expenditures against budgeted amount.
- **Corrective Controls**: Corrective controls are designed to reduce the impact or correct an error once it has been detected. Corrective controls may include the use of default dates on invoices where an operator has tried to enter the incorrect date. For example- Complete changes to IT access lists if individual's role changes is a corrective control. If an accounts clerk is transferred to the sales department as a salesman his/her access rights to the general ledger and other finance functions should be removed and he/she should be given access only to functions required to perform his sales job. Some other examples of Corrective Controls are Submit corrective journal entries after discovering an error; A Business Continuity Plan (BCP); Contingency planning; Backup procedure; Rerun procedures; Change input value to an application system; and Investigate budget variance and report violations.

(b)

2. (a) Let us define the variables first:

itm_tp = Item Type;	Part Cost = prt_cst;
itm_cst = Item Cost;	N = counter

The required flowchart is as below:



3.

(a)

10. Risks are mitigated by implementing internal controls as appropriate to the business environment. These types of controls must be integrated in the IT solution implemented at the bank's branches. Some examples of internal controls in bank branch are given here:

- Work of one staff member is invariably supervised/ checked by another staff member, irrespective of the nature of work (Maker-Checker process).
- A system of job rotation among staff exists.
- Financial and administrative powers of each official/ position is fixed and communicated to all persons concerned.
- Branch managers must send periodic confirmation to their controlling authority on compliance of the laid down systems and procedures.
- All books are to be balanced periodically. Balancing is to be confirmed by an authorized official.
- Details of lost security forms are immediately advised to controlling so that they can exercise caution.
- Fraud prone items like currency, valuables, draft forms, term deposit receipts, traveler's cheques and other such security forms are in the custody of at least two officials of the branch.

(b)

(ii) Advantages of DBMS

Major advantages of DBMS are given as follows:

- **Permitting Data Sharing:** One of the principle advantages of a DBMS is that the same information can be made available to different users.
- **Minimizing Data Redundancy:** In a DBMS duplication of information or redundancy is, if not eliminated, carefully controlled or reduced i.e. there is no need to repeat the same data over and over again. Minimizing redundancy can therefore significantly reduce the cost of storing information on hard drives and other storage devices.
- **Integrity can be maintained:** Data integrity is maintained by having accurate, consistent, and up-to-date data. Updates and changes to the data only must be made in one place in DBMS ensuring Integrity. The chances of making a mistake increase if the same data needs to be changed at several different places than making the change in one place.

- **Program and File consistency:** Using a DBMS, file formats and programs are standardized. This makes the data files easier to maintain because the same rules and guidelines apply across all types of data. The level of consistency across files and programs also makes it easier to manage data when multiple programmers are involved.
- **User-friendly:** DBMS makes the data access and manipulation easier for the user. DBMS also reduce the reliance of users on computer experts to meet their data needs.

- **Improved security:** DBMSs allow multiple users to access the same data resources which could lead to risk to an enterprise if not controlled. Security constraints can be defined i.e. Rules can be built to give access to sensitive data. Some sources of information should be protected or secured and only viewed by select individuals. Using passwords, database management systems can be used to restrict data access to only those who should see it.
- **Achieving program/data independence:** In a DBMS, data does not reside in applications but data bases program & data are independent of each other.
- **Faster Application Development:** In the case of deployment of DBMS, application development becomes fast. The data is already therein databases, application developer has to think of only the logic required to retrieve the data in the way a user needs.

(iii) Disadvantages of a DBMS

There are basically two major downsides to using DBMSs. One of these is cost (both system and user training), and the other is the threat to data security. These are given as under:

- **Cost:** Implementing a DBMS system can be expensive and time-consuming, especially in large enterprises. Training requirements alone can be quite costly.
- **Security:** Even with safeguards in place, it may be possible for some unauthorized users to access the database. If one gets access to database, then it could be an all or nothing proposition.

4

(a)

III. What is XBRL tagging?

XBRL Tagging is the process by which any financial data is tagged with the most appropriate element in an accounting taxonomy (a dictionary of accounting terms) that best represents the data in addition to tags that facilitate identification/classification (such as enterprise, reporting period, reporting currency, unit of measurement etc.). Since all XBRL reports use the same taxonomy, numbers associated with the same element are comparable irrespective of how they are described by those releasing the financial statements.

Comprehensive definitions and accurate data tags allow preparation, validation, publication, exchange, consumption; and analysis of business information of all kinds. Information in reports prepared using the XBRL standard is interchangeable between different information systems in entirely different organizations. This allows for the exchange of business information across a reporting chain. People that want to report information, share information, publish performance information and allow straight through information processing all rely on XBRL.

In addition to allowing the exchange of summary business reports, like financial statements, and risk and performance reports, XBRL has the capability to allow the tagging of transactions that can themselves be aggregated into XBRL reports. These transactional capabilities allow system-independent exchange and analysis of

significant quantities of supporting data and can be the key to transforming reporting supply chains.

V. Important features of XBRL

- **Clear Definitions:** XBRL allows the creation of reusable, authoritative definitions, called taxonomies, that capture the meaning contained in all the reporting terms used in a business report, as well as the relationships between all of the terms. Taxonomies are developed by regulators, accounting standards setters, government agencies and other groups that need to clearly define information that needs to be reported upon. XBRL doesn't limit what kind of information is defined: it's a language that can be used and extended as needed.
- **Testable Business Rules:** XBRL allows the creation of business rules that constrain what can be reported. Business rules can be logical or mathematical, or both and can be used, for example, these business rules can be used to:
    - stop poor quality information being sent to a regulator or third party, by being run by the preparer while the report is in draft.
    - stop poor quality information being accepted by a regulator or third party, by being run at the point that the information is being received. Business reports that fail critical rules can be bounced back to the preparer for review and resubmission.
    - flagging or highlighting questionable information, allowing prompt follow up, correction or explanation.
    - create ratios, aggregations and other kinds of value-added information, based on the fundamental data provided.

- **Multi-lingual Support:** XBRL allows concept definitions to be prepared in as many languages as necessary. Translations of definitions can also be added by third parties. This means that it's possible to display a range of reports in a different language to the one that they were prepared in, without any additional work. The XBRL community makes extensive use of this capability as it can automatically openup reports to different communities.
- **Strong Software Support:** XBRL is supported by a very wide range of software from vendors large and small, allowing a very wide range of stakeholders to work with the standard.

(b)

II. Input Controls

Data that is presented to an application as input data must be validated for authorization, reasonableness, completeness, and integrity. These controls are responsible for ensuring the accuracy and completeness of data and instruction input into an application system. Input controls are important since substantial time is spent on input of data, involve human intervention and are, therefore error and fraud prone.

Controls relating to data input are critical. It might be necessary to reprocess input data in the event, master files are lost, corrupted, or destroyed. Controls relating to instructions are often in the form of changes to data, which are recorded in the audit trail. Thus, source documents or transaction listings are to be stored securely for

longer periods for reasons – compliance with statutory requirements. Input controls are divided into the following broad classes as shown in Fig. 3.5.3:

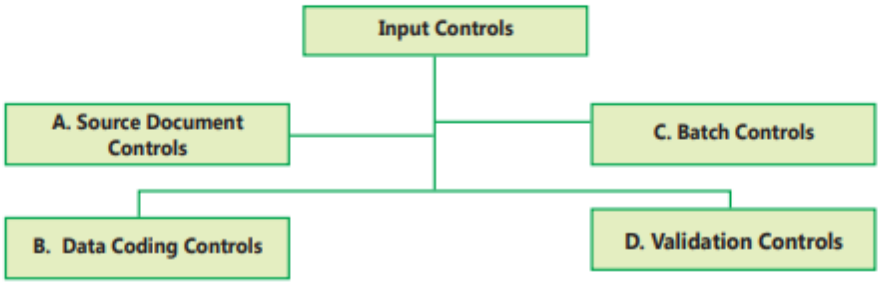


Fig. 3.5.3: Classification of Input Controls

5.

(a)

(C) Logical Access Controls: These are the controls relating to logical access to information resources such as operating systems controls, application software boundary controls, networking controls, access to database objects, encryption controls etc. Logical access controls are implemented to ensure that access to systems, data and programs is restricted to authorized users to safeguard information against unauthorized use, disclosure or modification, damage or loss. The key factors considered in designing logical access controls include confidentiality and privacy requirements, authorization, authentication and incident handling, reporting and follow-up, virus prevention and detection, firewalls, centralized security administration, user training and tools for monitoring compliance, intrusion testing and reporting.

Logical access controls are the system-based mechanisms used to designate who or what is to have access to a specific system resource and the type of transactions and functions that are permitted.

Compromise or absence of logical access controls in the organizations may result in potential losses due to exposures that may lead to the total shutdown of the computer functions. Intentional or accidental exposures of logical access control encourage technical exposures (in the Table 3.5.4) and computer crimes (in the Fig. 3.5.2). These are given as follows:

Table 3.5.4: Technical Exposures

Technical Exposures : Technical exposures include unauthorized implementation or modification of data and software. Technical exposures include the following:

- **Data Diddling:** This involves the change of data before or after they entered the system. A limited technical knowledge is required to data diddle and the worst part with this is that it occurs before computer security can protect the data.
- **Bomb:** Bomb is a piece of bad code deliberately planted by an insider or supplier of a program. An event, which is logical, triggers a bomb or time based. The bombs explode when the conditions of explosion get fulfilled causing the damage immediately. However, these programs cannot infect other programs. Since, these programs do not circulate by infecting other programs; chances of a widespread epidemic are relatively low.
- **Christmas Card:** It is a well-known example of Trojan and was detected on internal E-mail of IBM system. On typing the word 'Christmas', it will draw the Christmas tree as expected, but in addition, it will send copies of similar output to all other users connected to the network. Because of this

- **Christmas Card:** It is a well-known example of Trojan and was detected on internal E-mail of IBM system. On typing the word 'Christmas', it will draw the Christmas tree as expected, but in addition, it will send copies of similar output to all other users connected to the network. Because of this message on other terminals, other users cannot save their half-finished work.
- **Worm:** A worm does not require a host program like a Trojan to relocate itself. Thus, a Worm program copies itself to another machine on the network. Since, worms are stand-alone programs, and they can be detected easily in comparison to Trojans and computer viruses. Examples of worms are Existential Worm, Alarm clock Worm etc. The Alarm Clock worm places wake-up calls on a list of users. It passes through the network to an outgoing terminal while the sole purpose of existential worm is to remain alive. Existential worm does not cause damage to the system, but only copies itself to several places in a computer network.
- **Rounding Down:** This refers to rounding of small fractions of a denomination and transferring these small fractions into an authorized account. As the amount is small, it gets rarely noticed.

- **Salami Techniques:** This involves slicing of small amounts of money from a computerized transaction or account. A Salami technique is slightly different from a rounding technique in the sense a fix amount is deducted. For example, in the rounding off technique, `21,23,456.39 becomes `21,23,456.40, while in the Salami technique the transaction amount `21,23,456.39 is truncated to either `21,23,456.30 or `21,23,456.00, depending on the logic.
- **Trap Doors:** Trap doors allow insertion of specific logic, such as program interrupts that permit a review of data. They also permit insertion of unauthorized logic.
- **Spoofing:** A spoofing attack involves forging one's source address. One machine is used to impersonate the other in spoofing technique. Spoofing occurs only after a particular machine has been identified as vulnerable. A penetrator makes the user think that s/he is interacting with the operating system. For example, a penetrator duplicates the login procedure, captures the user's password, attempts for a system crash and makes the user login again.

(b)

I. Concept of Virtualization

The core concept of Virtualization lies in Partitioning, which divides a single physical server into multiple logical servers. Once the physical server is divided, each logical server can run an operating system and applications independently. For example - Partitioning of a hard drive is considered virtualization because one drive is partitioned in a way to create two separate hard drives. Devices, applications and human users are able to interact with the virtual resource as if it were a real single logical resource.

II. Application Areas of Virtualization

- **Server Consolidation:** Virtual machines are used to consolidate many physical servers into fewer servers, which in turn host virtual machines. Each physical server is reflected as a virtual machine "guest" residing on a virtual machine host system. This is also known as "Physical-to-Virtual" or 'P2V' transformation.
- **Disaster Recovery:** Virtual machines can be used as "hot standby" environments

for physical production servers. This changes the classical "backup-and-restore" philosophy, by providing backup images that can "boot" into live virtual machines, capable of taking over workload for a production server experiencing an outage.

- **Testing and Training:** Virtualization can give root access to a virtual machine. This can be very useful such as in kernel development and operating system courses.
- **Portable Applications:** Portable applications are needed when running an application from a removable drive, without installing it on the system's main disk drive. Virtualization can be used to encapsulate the application with a redirection layer that stores temporary files, windows registry entries and other state information in the application's installation directory and not within the system's permanent file system.
- **Portable Workspaces:** Recent technologies have used virtualization to create portable workspaces on devices like iPods and USB memory sticks.

6.

(a)

1.9.1 The Companies Act, 2013

The Companies Act, 2013 has two very important Sections - **Section 134** and **Section 143**, which have a direct impact on the audit and accounting profession.

(i) Section 134

Section 134 of the Companies Act, 2013 on "Financial statement, Board's report, etc." states inter alia:

The **Directors' Responsibility Statement** referred to in clause (c) of sub-section (3) shall state that:

the Directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities;

the directors, in the case of a listed company, had laid down internal financial controls to be followed by the company and that such internal financial controls are adequate and were operating effectively.

Explanation: For the purposes of this clause, the term "internal financial controls" means the policies and procedures adopted by the company for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial informationthe directors had devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively

(ii) Section 143

Section 143, of the Companies Act 2013, on "Powers and duties of auditors and auditing standards" states inter alia:

Section 143(3) contains the **auditor's report** which states:

"whether the company has adequate internal financial controls system in place and the operating effectiveness of such controls";

When we talk in terms of "adequacy and effectiveness of controls"; it refers to the adequacy of the control design and whether the control has been working effectively during the relevant financial year. The impact of this statement is that it involves continuous control monitoring during the year and not a review "as at" a particular date.

For example, let us assume that a company has a sales invoicing control wherein all sales invoices raised by the salesman which is greater that ₹ 50,000/- are reviewed and approved by the sales manager. In terms of the of the control design this control may seem adequate. However, if during audit, it was found that, during the year, there were many invoices raised by the salesman which was greater than ₹ 50,000/- and not reviewed and approved by the sales manager. In such a case, although the control design was adequate, the control was not working effectively, due to many exceptions without proper approval.

(b)

(b) Application Software - Configuration, Masters, Transactions and Reports

Application Software whether it is a high-end CBS software, ERP software or a simple accounting software, have primarily four gateways through which enterprise can control functioning, access and use the various menus and functions of the software. These are as follows:

(i) **Configuration:** In the context of CBS software, **Configuration** refers to the way a software system is set up for use. Configuration is the first step after installing the software. This involves setting up various parameters (configuration) as per policies and business process rules. In newer technologies, such as plug-and-play, much of this configuration is performed automatically. However, in case of application software, this needs to be done. Most of the system software are also configured with default parameters which need to be modified. Configuration

will also enable how the products and services are distinguished from each other. For example, a common module of deposits can be modified as current with configuration, no interest is paid, any no. of transactions is allowed, service charges are levied, customer type as "not individual", etc. The work flow for each of the products or services can also be configured. It is very critical to configure the software correctly as per specific policies, procedures and practices of the bank. The various modules of the banks such as advances, deposits, access rules, user creation, cash, treasury, etc. must be configured as deployed in the bank. Configuration could include both hardware and software parameters. Configuration will define how software will function and what menu options are displayed.

Configuration will define how software will function and what menu options are displayed.

Some examples of configuration are given here:

- Defining access rules from various devices/terminals.
- Creation of User Types
- Creation of Customer Type, Deposit Type, year-end process
- User Access & privileges - Configuration & its management
- Password Management

(ii) **Masters:** In a CBS software, **Masters** refer to the setting parameters for various types of product and service type as per software modules used in the bank. The masters are also referred to as standing data as these are changed only when required and will require higher level of access. The parameter settings in the masters will drive how the software will process relevant transactions. For example, the interest parameters will be used for computing interest for various type of deposits/advances. After configuring the software, the masters are set up first time during installation and these are changed whenever the business process rules or values. For example: If RBI has changed the lending rates based on which bank has decided to change the interest rates for specific type of advances, the interest parameters are to be updated. Any changes to these data should be authorized by appropriate personnel and these are logged and captured in exception reports. For example, if NPA rules are changed by RBI, then bank should update the NPA parameters, then these changes will be logged and captured in a log file and will also be part of the exception report.

Some examples of masters are as follows:

- **Customer Master for advances:** Credit limit, loan period, interest rate, penal interest rate, security offered, sanction terms, customer details, etc.
- **Deposit Master:** Interest rate, type of deposit, service charges, period of interest computation, Minimum balance, withdrawal limits, a/c type (NRE/ NRO), etc.

- **Customer Master**: Customer type, details, address, PAN details,
- **Employee Master**: Employee Name, Id, designation, level, joining details, salary, leave, etc.
- **Income Tax Master**: Tax rates applicable, Slabs, frequency of TDS, etc.

(iii) **Transactions**: In the context of CBS software, **Transactions** refer to the actual transactions of various products and services which can be user using menus and functions and by customer through internet/mobile banking. The transactions are allowed based on user access and access authorization matrix set. For example, for each user, access to specific modules, type of transactions, and what they can do: entry, authorize or view would be possible. Some examples of transactions are given here:

- **Deposit transactions:** opening of a/c, deposits, withdrawals, interest computation, etc.
- **Advances transactions:** opening of a/c, deposits, withdrawals, transfers, closure, etc.
- **ECS transactions:** Entry, upload, authorize/approve, update, etc.
- **General Ledger:** Expense accounting, interest computation update, charges update, etc.

(iv) **Reports:** Users at different levels used information which is processed by the computers. This information could be in form of reports which are periodically generated or on demand. These reports could be standard or adhoc reports. The reports could be used for monitoring the operations as also for tracking the performance or security. CBS software has extensive reporting features with standard reports and options to generate adhoc reports as required by user. CBS Software also have development platform using which, the bank can develop specific reports as required on standard or on an ad hoc basis. Most of the compliance and MIS reports are developed/available by default in a CBS software. However, depending on the management style and information requirements reporting features would be used by the bank.

Some examples of reports are as follows:

- Summary of transactions of day
- Daily General Ledger (GL) of day
- Activity Logging and reviewing
- MIS report for each product or service
- Reports covering performance/compliance
- Reports of exceptions, etc.

SECTION B

1.

(a)

(d) Incorrect: Marketing function and production function complement each other. They need to work in tandem to produce goods as per the needs and preferences of the customers. Marketing links the production with the customers.

(b)

(h) Incorrect: Benchmarking relates to setting goals and measuring productivity based on best industry practices. The idea is to learn from the practices of competitors and others to improve the firm's performance. On the other hand, business process reengineering relates to analysis and redesign of workflows and processes both within and between the organizations.

(c)

2. (a) (i) Incorrect: The acronym BCG stands for Boston Consulting Group, an organization that developed a matrix to portray an organizational corporate portfolio of investment. This matrix depicts growth of business and the business share enjoyed by an organization. The matrix is also known for its cow and dog metaphors and is popularly used for resource allocation in a diversified company.

(d)

(b) Correct: The human resource manager has a significant role to play in developing core competency of the firm. A core competence is a unique strength of an organization which may not be shared by others. Core-competencies can be generated and maintained only through the effective management of human resources and their skills.

(e)

(a) Incorrect: Strategy formulation is primarily an intellectual process and strategy implementation is primarily an operational process. Strategy formulation is based on strategic decision-making which requires analysis and thinking while strategy implementation is based on strategic as well as operational decision-making which requires action and doing.

2.

(a)

(b) Network structure is a more radical organizational design. The network structure could be termed as 'non-structure' as it virtually eliminates in-house business functions and outsource many of them. A corporation organized in this manner is a virtual organization because it is composed of a series of project groups or collaborations linked by constantly changing non-hierarchical, cobweb-like networks.

(b)

(e) 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.

(c)

5. **(a)** An entrepreneur is an individual who conceives the idea of starting a new venture, takes all types of risks, not only to put the product or service into reality but also to make it an extremely demanding one. An entrepreneur is one who:

- Initiates and innovates a new concept.
- Recognises and utilises opportunity.
- Arranges and coordinates resources such as man, material, machine and capital.
- Faces risks and uncertainties.
- Establishes a startup company.
- Adds value to the product or service.
- Takes decisions to make the product or service a profitable one.
- Is responsible for the profits or losses of the company.

(d)

What is Value Creation?

The concept of value creation was introduced primarily for providing products and services to the customers with more worth. Value is measured by a product's features, quality, availability, durability, performance and by its services for which customers are willing to pay. Further, the concept took more space in the business and organizations started discussing about the value creation for stakeholders.

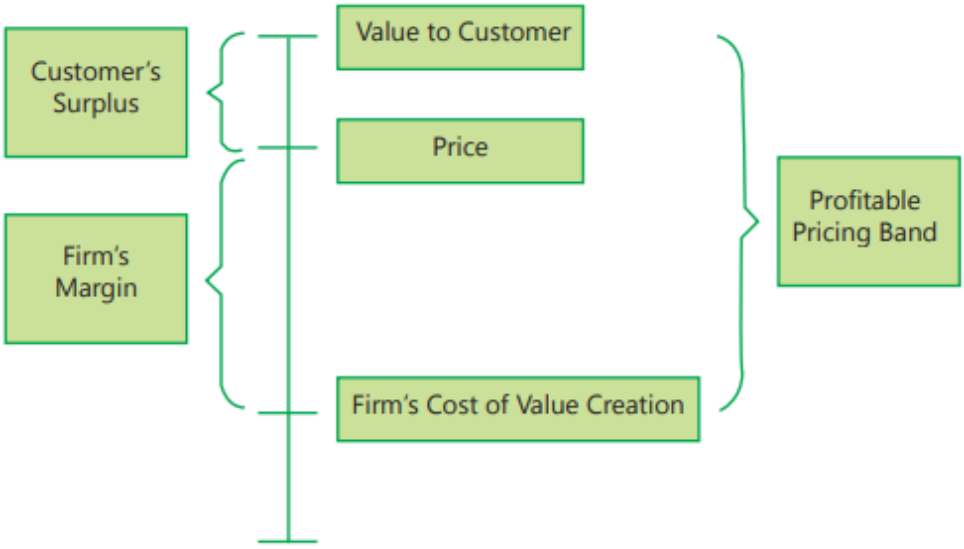


Figure: Value Creation

Thus, we can say that the value creation is an activity or performance by the firm to create value that increases the worth of goods, services, business processes or even the whole business system. Many businesses now focus on value creation both in the context of creating better value for customers purchasing its products and services, as well as for stakeholders in the business who want to see their investment in business appreciate in value. Ultimately, this concept gives business a competitive advantage in the industry and helps them earn above average profits/returns.

(e)

5.5 Best-Cost Provider Strategy

The new model of best cost provider strategy is a further development of above three generic strategies. It is directed towards giving customers more value for the money by emphasizing both low cost and upscale differences. The objective is to keep costs and prices lower than those of other sellers of comparable products.

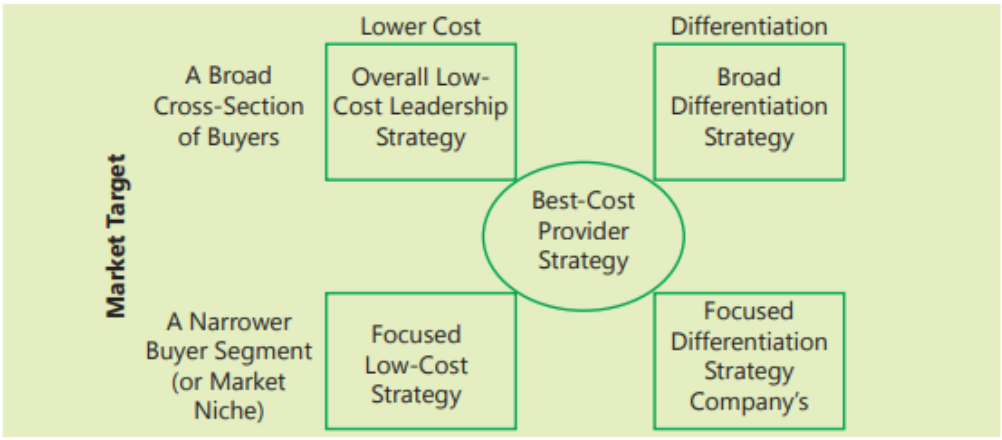


Figure: The Five Generic Competitive Strategies

Best-cost provider strategy involves providing customers more value for the money by emphasizing low cost and better quality difference. It can be done:

(a) through offering products at lower price than what is being offered by rivals for products with comparable quality and features or

(b) charging similar price as by the rivals for products with much higher quality and better features.

3.

(a)

(ii) Concentric diversification occurs when a firm adds related products or markets. On the other hand, conglomerate diversification occurs when a firm diversifies into areas that are unrelated to its current line of business.

In concentric diversification, the new business is linked to the existing businesses through process, technology or marketing. In conglomerate diversification, no such linkages exist; the new business/product is disjointed from the existing businesses/products.

The most common reasons for pursuing a concentric diversification are that opportunities in a firm's existing line of business are available. However, common reasons for pursuing a conglomerate growth strategy is that opportunities in a firm's current line of business are limited or opportunities outside are highly lucrative.

(b)

(e) Differences between Operational Control and Management Control are as under:

(i) The thrust of operational control is on individual tasks or transactions as against total or more aggregative management functions. When compared with operational, management control is more inclusive and more aggregative, in the sense of embracing the integrated activities of a complete department, division or even entire organisation, instead or mere narrowly circumscribed activities of sub-units. For example, procuring specific items for inventory is a matter of operational control, in contrast to inventory management as a whole.

(ii) Many of the control systems in organisations are operational and mechanistic in nature. A set of standards, plans and instructions are formulated. On the other hand the basic purpose of management control is the achievement of enterprise goals – short range and long range – in an effective and efficient manner.

4.

(a)

(a) A strategy audit is an examination and evaluation of areas affected by the operation of a strategic management process within an organization. The audit of management performance with regard to its strategies helps an organization identify problem areas and correct the strategic approaches that have not been effective.

Strategy audit is needed under the following conditions:

(a) When the performance indicators reflect that a strategy is not working properly or is not producing desired outcomes.

(b) When the goals and objectives of the strategy are not being accomplished.

(c) When a major change takes place in the external environment of the organization.

(d) When the top management plans:

i. to fine-tune the existing strategies and introduce new strategies and

ii. to ensure that a strategy that has worked in the past continues to be in-tune with subtle internal and external changes that may have occurred since the formulation of strategies.

The difficulties in strategy audit can be explained in terms of following trends:

- A dramatic increase in the environment's complexity.
- The increasing difficulty of predicting the future with accuracy.
- The increasing number of variables in the environment.
- The rapid rate of obsolescence of even the best plans.
- The increase in the number of both domestic and world events affecting organizations.
- The decreasing time span for which planning can be done with any degree of certainty.

(b)

3. (a) An important component of strategic thinking requires the generation of a series of strategic alternatives, or choices of future strategies to pursue, given the company's internal strengths and weaknesses and its external opportunities and threats. The comparison of strengths, weaknesses, opportunities, and threats is normally referred to as SWOT analysis.

- **Strength**: Strength is an inherent capability of the organization which it can use to gain strategic advantage over its competitors.
- **Weakness**: A weakness is an inherent limitation or constraint of the organization which creates strategic disadvantage to it.
- **Opportunity**: An opportunity is a favourable condition in the organisation's environment which enables it to strengthen its position.
- **Threat**: A threat is an unfavourable condition in the organisation's environment which causes a risk for, or damage to, the organisation's position.

SWOT analysis helps managers to craft a business model *(or* models) that will allow a company to gain a competitive advantage in its industry *(or* industries). Competitive advantage leads to increased profitability, and this maximizes a company's chances of surviving in the fast-changing, competitive environment. Key reasons for SWOT analyses are:

- It provides a logical framework.
- It presents a comparative account.
- It guides the strategist in strategy identification.

5.

(a)

Question 6

What do you understand by the term marketing mix? Discuss its various components.

Answer

Marketing mix forms an important part of overall competitive marketing strategy. The marketing mix is the set of controllable marketing variables that the firm blends to produce the response it wants in the target market. The marketing mix consists of everything that the firm can do to influence the demand for its product. These variables are often referred to as the "4 Ps." The 4 Ps stand for product, price, place and promotion. An effective marketing program blends all of the marketing mix elements into a coordinated program designed to achieve the company's marketing objectives by delivering value to consumers. The 4 Ps are from a marketer's angle. When translated to buyers angle they may be termed as 4 Cs. Product may be referred as customer solution, price as customer cost, place as convenience and promotion as communication.

Components of Marketing Mix

1. **Product** stands for the "goods-and-service" combination the company offers to the target market. Strategies are needed for managing existing product over time adding new ones and dropping failed products. Strategic decisions must also be made regarding branding, packaging and other product features such as warrantees.

   Products and markets are infinitely dynamic.

   Products can be differentiated on the basis of size, shape, colour, packaging, brand names, after-sales service and so on. Organizations seek to hammer into customers' minds that their products are different from others. It does not matter whether the differentiation is real or imaginary. Quite often the differentiation

is psychological rather than physical. It is enough if customers are persuaded to believe that the marketer's product is different from others.

Organizations formalize product differentiation through 'brand names'. The products' and even firms' image is built around brand through advertising and other promotional strategies. Customers tend to develop strong brand loyalty for a particular product over a period of time.

2. **Price** stands for the amount of money customers have to pay to obtain the product. Necessary strategies pertain to the location of the customers, price flexibility, related items within a product line and terms of sale. The price of a product is its composite expression of its value and utility to the customer, its demand, quality, reliability, safety, the competition it faces, the desired profit and so on.

   For a new product pricing strategies for entering a market needs to be designed. In pricing a really new product at least three objectives must be kept in mind.

   (a) Making the product acceptable to the customers.

   (b) Producing a reasonable margin over cost.

   (c) Achieving a market that helps in developing market share.

   For a new product an organization may either choose to skim or penetrate the market. In *skimming* prices are set at a very high level. The product is directed to those buyers who are relatively price insensitive but sensitive to the novelty of the new product. For example call rates of mobile telephony were set very high initially. Even the incoming calls were charged. Since the initial offtake of the product is low, high price, in a way, helps in rationing of supply in favour of those who can afford it. In penetration firm keeps a temptingly low price for a new product which itself is selling point. A very large number of the potential consumer may be able to afford and willing to try the product.

3. **Place** stands for company activities that make the product available to target consumers. One of the most basic marketing decision is choosing the most appropriate marketing channel. Strategies should be taken for the management

appropriate marketing channel. Strategies should be taken for the management of channel(s) by which ownership of product is transferred from producers to customers and in many cases, the system(s) by which goods are moved from where they are produced to where they are purchased by the final customers. Strategies applicable to the middleman such as wholesalers and retails must be designed.

The distribution policies of a company are important determinants of the functions of marketing. The decision to utilize a particular marketing channel or channels sets the pattern of operations of sales force.

4. **Promotion** stands for activities that communicate the merits of the product and persuade target consumers to buy it. Strategies are needed to combine individual methods such as advertising, personal selling, and sales promotion into a coordinated campaign. In addition promotional strategies must be adjusted as a product move from an earlier stages from a later stage of its life.

Modern marketing is highly promotional oriented. Organizations strive to push their sales and market standing on a sustained basis and in a profitable manner under conditions of complex direct and indirect competitive situations. Promotion also acts as an impetus to marketing. It is simultaneously a communication, persuasion and conditioning process. There are at least four major direct promotional methods or tools – personal selling, advertising, publicity and sales promotion. They are briefly explained as follows:

(i) *Personal Selling*: Personal selling is one of the oldest forms of promotion. It involves face-to-face interaction of sales force with the prospective customers and provides a high degree of personal attention to them. In personal selling, oral communication is made with potential buyers of a product with the intention of making a sale. It may initially focus on developing a relationship with the potential buyer, but end up with efforts for making a sale. Personal selling suffers from a very high costs as sales personnel are expensive. They can physically attend only one customer at a time. Thus it is not a cost-effective way of reaching a large number of people.

(ii) *Advertising*: Advertising is a non-personal, highly flexible and dynamic promotional method. The media for advertisings are several such as pamphlets, brochures, newspapers, magazines, hoardings, display boards, radio, television and internet. Choice of appropriate media is important for effectiveness of the message. The media may be local, regional, or national. The type of the message, copy, illustration are a matter of choice and creativity. Advertising may be directed towards consumers, middlemen or opinion leaders. Advertising is likely to succeed in promoting the sales of an organization but its effectiveness in respect to the expenditure can not be directly measured. Sales is a function of several variables out of which advertising is only one.

(iii) *Publicity*: Publicity is also a non-personal form of promotion similar to advertising. However, no payments are made to the media as in case of advertising. Organizations skillfully seek to promote themselves and their product without payment. Publicity is communication of a product, brand or business by placing information about it in the media without paying for the time or media space directly. Thus it is a way of reaching customers

with negligible cost. Basic tools for publicity are press releases, press conferences, reports, stories, and internet releases. These releases must be of interest to the public.

(iv) *Sales promotion*: Sales promotion is an omnibus term that includes all activities that are undertaken to promote the business but are not specifically included under personal selling, advertising or publicity. Activities like discounts, contests, money refunds, installments, kiosks, exhibitions and fairs constitute sales promotion. All these are meant to give a boost to the sales.

Expanded Marketing Mix: Typically, all organizations use a combination of 4 Ps in some form or the other. However, the above elements of marketing mix are not exhaustive. It is pertinent to discuss a few more elements that may form part of an organizational marketing mix strategy. They have got more currency in recent years. Growth of services has its own share for the inclusion of newer elements in marketing. A few included later Ps are as follows:

- *People*: all human actors who play a part in delivery of the market offering and thus influence the buyer's perception, namely the firm's personnel and the customer.
- *Physical evidence*: the environment in which the market offering is delivered and where the firm and customer interact.
- *Process*: the actual procedures, mechanisms and flow of activities by which the product / service is delivered.

(b)

(a) Decision making is a managerial process of selecting the best course of action out of several alternative courses for the purpose of accomplishment of the organizational goals. Decisions may be operational i.e., which relate to general day-to-day operations. They may also be strategic in nature. According to Jahuch and Glueck **"Strategic decisions encompass the definition of the business, products to be handled, markets to be served, functions to be performed and major policies needed for the organisation to execute these decisions to achieve the strategic objectives."**

6.

(a)

(d) Yes, strategy is partly proactive and partly reactive. In proactive strategy, organizations will analyze possible environmental scenarios and create strategic framework after proper planning and set procedures and work on these strategies in a predetermined manner. However, in reality no company can forecast both internal and external environment exactly. Everything cannot be planned in advance. It is not possible to anticipate moves of rival firms, consumer behaviour, evolving technologies and so on.

There can be significant deviations between what was visualized and what actually happens. Strategies need to be attuned or modified in the light of possible environmental changes. There can be significant or major strategic changes when the environment demands. Reactive strategy is triggered by the changes in the environment and provides ways and means to cope with the negative factors or take advantage of emerging opportunities.

(b)

(c) 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.

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 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.

(c)

(f) The primary task of the strategic manager is conceptualizing, designing and executing company strategies.

For this purpose, his tasks will include:

- Defining the mission and goals of the organization.
- Determining what businesses it should be in.
- Allocating resources among the different businesses.
- Formulating and implementing strategies that span individual businesses.
- Providing leadership for the organization.

(d)

(c) Cost leadership emphasizes producing standardized products at a very low per-unit cost for consumers who are price-sensitive. Differentiation is a strategy aimed at producing products and services considered unique industry wide and directed at consumers who are relatively price-insensitive.

A primary reason for pursuing forward, backward, and horizontal integration strategies is to gain cost leadership benefits. But cost leadership generally must be pursued in conjunction with differentiation. Different strategies offer different degrees of differentiation. A differentiation strategy should be pursued only after a careful study of buyers' needs and preferences to determine the feasibility of incorporating one or more differentiating features into a unique product. A successful differentiation strategy allows a firm to charge a higher price for its product and to gain customer loyalty.

(e)

(c) 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:

- It helps organizations to be more proactive rather than reactive in dealing with its future. It facilitates the organisations 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 organizations to evolve certain core competencies and competitive advantages that assist in the fight for survival and growth.