

PAPER – 7: ENTERPRISE INFORMATION SYSTEMS AND STRATEGIC MANAGEMENT

SECTION – A: ENTERPRISE INFORMATION SYSTEMS

Question No. 1 is compulsory.

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

Question 1

- (a) *Corporate governance is the framework of rules and practices, by which a board of directors ensures accountability, fairness and transparency in a company's relationship with all its stakeholders. List out the rules and procedures that constitute corporate governance framework.* **(3 Marks)**
- (b) *Write any two application areas of Internet of Things (IoT).* **(2 Marks)**

Answer

- (a) The Corporate Governance Framework consists of:
- explicit and implicit contracts between the company and the stakeholders for distribution of responsibilities, rights, and rewards;
 - procedures for reconciling the sometimes-conflicting interests of stakeholders in accordance with their duties, privileges and roles; and
 - procedures for proper supervision, control, and information-flows to serve as a system of checks-and-balances.
- (b) Some of the applications area of Internet of Things (IoT) are as follows:
- All home appliances to be connected and that shall create a virtual home.
 - Home owners can keep track of all activities in house through their hand-held devices.
 - Home security CCTV is also monitored through hand held devices.
 - Office machines shall be connected through internet.
 - Human resource managers shall be able to see how many people have had a cup of coffee from vending machine and how many are present.
 - How many printouts are being generated through office printer?
 - Governments can keep track of resource utilizations/extra support needed. For example- under SWACHH mission, government can tag all dustbins with IoT sensors. They (dustbins) generate a message once they are full. Being connected to wi-fi, they can intimate the cleaning supervisor of Municipal Corporation so that BIN can be emptied.

- As a research study, individuals have got themselves implanted with electronic chips in their bodies. This chip allows him/her to connect to home/office wi-fi. Once connected person can enter home/office and perform designated function. This chip becomes individual's authentication token.
- 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.
- India's living legend of cricket appearing in an Advertisement for water purifier informs that, the water purifier is Wi-Fi enabled. When the purifying agents deplete in the machine, it connects to home Wi-Fi and informs the service agents of the company.

Question 2

- (a) A company XYZ is implementing the software using the program development life cycle methodology and applying control phases in parallel to the development phases to monitor the progress against plan. Being an IT developer, design the various phases and their controls for program development life cycle. **(6 Marks)**
- (b) Customer Relationship Management (CRM) is a system which aims at improving relationship with customers. Briefly explain any four key benefits of CRM module of ERP. **(4 Marks)**

Answer

- (a) The primary objective of Program Development Life Cycle phase within the Systems Development Life Cycle is to produce or acquire and to implement high-quality programs. This includes the following phases:
- **Planning:** Techniques like Work Breakdown Structures (WBS), Gantt Charts and PERT (Program Evaluation and Review Technique) Charts can be used to monitor progress against plan.
 - **Control:** The Control phase has two major purposes:
 - Task progress in various software life-cycle phases should be monitored against plan and corrective action should be taken in case of any deviations.
 - Control over software development, acquisition, and implementation tasks should be exercised to ensure that the software released for production use is authentic, accurate, and complete.
 - **Design:** A systematic approach to program design, such as any of the structured design approaches or object-oriented design is adopted.
 - **Coding:** Programmers must choose a module implementation and integration strategy like Top-down, Bottom-up and Threads approach; a coding strategy that

follows the precepts of structured programming, and a documentation strategy to ensure program code is easily readable and understandable.

- **Testing:** These tests are to ensure that a developed or acquired program achieves its specified requirements. These are as follows:
 - **Unit Testing** – which focuses on individual program modules;
 - **Integration Testing** – Which focuses in groups of program modules; and
 - **Whole-of-Program Testing** – which focuses on whole program.
- **Operation and Maintenance:** Management establishes formal mechanisms to monitor the status of operational programs so maintenance needs can be identified on a timely basis. Three types of maintenance can be used are as follows:
 - **Repair Maintenance:** in which program errors are corrected;
 - **Adaptive Maintenance:** in which the program is modified to meet changing user requirements; and
 - **Perfective Maintenance:** in which the program is tuned to decrease the resource consumption.

(b) Key benefits of a Customer Relationship Management (CRM) module of ERP are as under:

- **Improved customer relations:** One of the prime benefits of using a CRM is obtaining better customer satisfaction. By using this strategy, all dealings involving servicing, marketing, and selling out products to the customers can be carried out in an organized and systematic way. Better services can be provided to customers through improved understanding of their issues and this in turn helps in increasing customer loyalty and decreasing customer agitation. In this way, continuous feedback from the customers regarding the products and services can be received. It is also possible that the customers may recommend the product to their acquaintances, when efficient and satisfactory services are provided.
- **Increase customer revenues:** By using a CRM strategy for any business, the revenue of the company can be increased. Using the data collected, marketing campaigns can be popularized in a more effective way. With the help of CRM software, it can be ensured that the product promotions reach a different and brand new set of customers, and not the ones who had already purchased the product, and thus effectively increase the customer revenue.
- **Maximize up-selling and cross-selling:** A CRM system allows up-selling which is the practice of giving customers premium products that fall in the same category of their purchase. The strategy also facilitates cross selling which is the practice of offering complementary products to customers, based on their previous purchases. This is done by interacting with the customers and getting an idea about their wants, needs, and patterns of purchase. The details thus obtained will be stored in a central

database, which is accessible to all company executives. So, when an opportunity is spotted, the executives can promote their products to the customers, thus maximizing up-selling and cross selling.

- **Better internal communication:** Following a CRM strategy helps in building up better communication within the company. The sharing of customer data between different departments will enable them to work as a team. This is better than functioning as an isolated entity, as it will help in increasing the company's profitability and enabling better service to customers.
- **Optimize marketing:** CRM enables to understand the customer needs and behavior in a better way, thereby allowing any enterprise to identify the correct time to market its product to the customers. CRM will also give an idea about the most profitable customer groups, and by using this information, similar prospective groups, at the right time will be targeted. In this way, marketing resources can be optimized efficiently and time is not wasted on less profitable customer groups.

Question 3

- (a) *Information Technology (IT) risks can be reduced by implementing the right type and level of control in automated environment that is done by integrated controls into information technology. Being an IT consultant, suggest various steps of IT related control to a branch manager of a bank. (6 Marks)*
- (b) *A business organization is planning to increase the accuracy of information transferred and certifies the repeatability of the value-added task performed by the automation of business. Being a management consultant, identify any four major benefits that the organization can achieve through the automation of a business process. (4 Marks)*

Answer

- (a) IT risks need to be mitigated by implementing the right type and level of controls in the automated environment. Sample list of IT related controls in Banks are as follows:
- The system maintains a record of all log-ins and log-outs. If the transaction is sought to be posted to a dormant or inoperative account, the processing is halted and can be proceeded with only with a supervisory password.
 - The system checks whether the amount to be withdrawn is within the drawing power.
 - The system flashes a message if the balance in a lien account would fall below the lien amount after the processing of the transaction.
 - Access to the system is available only between stipulated hours and specified days only.
 - Individual users can access only specified directories and files. Users should be given access only on a 'need-to-know basis' based on their role in the bank. This is applicable for internal users of the bank and customers.

- Exception situations such as limit excess, reactivating dormant accounts, etc. can be handled only with a valid supervisory level password.
- A user timeout is prescribed that means that after a user logs-in and there is no activity for a pre-determined time, the user is automatically logged out of the system.
- Once the end-of-the-day process is over, the ledgers cannot be opened without a supervisory level password.

(b) Major benefits of automating Business Processes 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 best practices are constantly leveraged.
- **Governance & 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.

Question 4

- (a) *General controls are pervasive controls and apply to all system components, processes and data for a given enterprise or systems environment. As an IT consultant, discuss some of the controls covered under general controls which you would like to ensure for a given enterprise.* (6 Marks)
- (b) *Discuss the key activities, which require special attention for auditing the user access provisioning.* (4 Marks)

Answer

(a) General controls related to IT environment and Information Systems include the following:

- **Information Security Policy:** The security policy is approved by the senior management and encompasses all areas of operations of bank and drives access to information across the enterprise and other stakeholders.
- **Administration, Access and Authentication:** IT should be administered with appropriate policies and procedures clearly defining the levels of access to information and authentication of users.
- **Separation of key IT functions:** Secure deployment of IT requires the bank to have separate IT organization structure with key demarcation of duties for different personnel within IT department and to ensure that there are no SoD conflicts.
- **Management of Systems Acquisition and Implementation:** Software solutions for Core Banking Systems (CBS) are most developed acquired and implemented. Hence, process of acquisition and implementation of systems should be properly controlled.
- **Change Management:** IT solutions deployed and its various components must be changed in tune with changing needs as per changes in technology environment, business processes, regulatory and compliance requirements as these changes impact the live environment of banking services. Hence, change management process should be implemented to ensure smooth transition to new environments covering all key changes including hardware, software and business processes. All changes must be properly approved by the management before implementation.
- **Backup, Recovery and Business Continuity:** Heavy dependence on IT and criticality makes it imperative that resilience of banking operations should be ensured by having appropriate business continuity including backup, recovery and off-site data center.
- **Proper Development and Implementation of Application Software:** Application software drives the business processes of the banks. These solutions in case developed and implemented must be properly controlled by using standard software development process.
- **Confidentiality, Integrity and Availability of Software and data files:** Security is implemented to ensure Confidentiality, Integrity and Availability of information. **Confidentiality** refers to protection of critical information, **Integrity** refers to ensuring authenticity of information at all stages of processing or contents should not be altered, and **Availability** refers to ensuring availability of information to users when required. All IT operations need to be controlled by appropriate policies and procedures that refer to how IT is deployed, implemented and maintained within the bank.

- **Incident response and management:** There may be various incidents created due to failure of IT that need to be appropriately responded and managed as per pre-defined policies and procedures.
- (b) Auditing the user access provisioning process requires attention to several key activities that include the following:
- **Access request processes:** The IS auditor should identify all user access request processes and determine if these processes are used consistently throughout the organization.
 - **Access approvals:** The IS auditor needs to determine how requests are approved and by what authority they are approved. The auditor should determine if system or data owners approve access requests, or if any accesses are ever denied.
 - **New employee provisioning:** The IS auditor should examine the new employee provisioning process to see how a new employee's user accounts are initially set up. The auditor should determine if new employees' managers are aware of the access requests that their employees are given and if they are excessive.
 - **Segregation of Duties (SoD):** The IS auditor should determine if the organization makes any effort to identify segregation of duties. This may include whether there are any SoD matrices in existence and if they are actively used to make user access request decisions.
 - **Access reviews:** The IS auditor should determine if there are any periodic access reviews and what aspects of user accounts are reviewed; this may include termination reviews, internal transfer reviews, SoD reviews and dormant account reviews.

Question 5

- (a) *Mobile computing is an important and rapidly evolving technology that allows users to transmit data from remote location to other locations in mobility condition. Being a communication expert, identify the limitations in current scenario that impede or hesitate users to use this technology frequently.* **(8 Marks)**
- (b) *A business organization is shifting from traditional accounting system to computerized accounting system. The organization needs to store the data that is relatively permanent and not expected to change frequently in accounting system. As a financial expert, suggest any two types of such data in accounting system.* **(2 Marks)**

OR

Major feature of an ERP system is central database. Which are the options possible to different users while assigning access to it?

Answer

(a) Limitations of Mobile Computing are as follows:

- **Insufficient Bandwidth:** Mobile Internet access is generally slower than direct cable connections using technologies such as General Packet Radio Service (GPRS) and Enhanced Data for GSM (Global System for Mobile Communication) Evolution (EDGE), and 3G networks. These networks are usually available within range of commercial cell phone towers. Higher speed wireless LANs are inexpensive but have very limited range.
- **Security Standards:** When working mobile, one is dependent on public networks, requiring careful use of Virtual Private Network (VPN). Security is a major concern while concerning the mobile computing standards on the fleet. One can easily attack the VPN through a huge number of networks interconnected through the line.
- **Power consumption:** When a power outlet or portable generator is not available, mobile computers must rely entirely on battery power. Combined with the compact size of many mobile devices, this often means unusually expensive batteries must be used to obtain the necessary battery life.
- **Transmission interferences:** Weather, terrain, and the range from the nearest signal point can all interfere with signal reception. Reception in tunnels, some buildings, and rural areas is often poor.
- **Potential health hazards:** People who use mobile devices while driving is often distracted from driving, and are thus assumed more likely to be involved in traffic accidents. Cell phones may interfere with sensitive medical devices. There are allegations that cell phone signals may cause health problems.
- **Human interface with device:** Screens and keyboards tend to be small, which may make them hard to use. Alternate input methods such as speech or handwriting recognition require training.

(b) Master data is relatively permanent data that is not expected to change again and again. It may change, but not again and again. In accounting systems, there may be following type of master data.

- **Accounting Master Data:** This includes names of ledgers, groups, cost centers, accounting voucher types, etc. E.g. Capital Ledger is created once and not expected to change frequently. Similarly, all other ledgers like sales, purchase, expenses and income ledgers are created once and not expected to change again and again. Opening balance carried forward from previous year to next year is also a part of master data and not expected to change.
- **Inventory Master Data:** This includes stock items, stock groups, godowns, inventory voucher types, etc. Stock item is something which bought and sold for business purpose, trading goods. E.g. If a person is into the business of dealing in white goods,

stock items shall be Television, Fridge, Air Conditioner, etc. For a person running a medicine shop, all types of medicines shall be stock items for him/her.

- **Payroll Master Data:** Payroll is a system for calculation of salary and recoding of transactions relating to employees. Master data in case of payroll can be names of employees, group of employees, salary structure, pay heads, etc. These data are not expected to change frequently. E.g. Employee created in the system will remain as it is for a longer period of time, his/her salary structure may change but not frequently, pay heads associated with his/ her salary structure will be relatively permanent.
- **Statutory Master Data:** This is a master data relating to statute/law which may be different for different type of taxes. E.g. Goods and Service Tax (GST), Nature of Payments for Tax Deducted at Source (TDS), etc. This data also shall be relatively permanent. We don't have any control on this data as statutory changes are made by Government and not by us. In case of change in tax rates, forms, categories; we need to update/change our master data.

OR

While assigning access to different users in an ERP System, following options are possible.

- **Create** – Allows to create data.
- **Alter** – Allows to alter data.
- **View** – Allows only to view data.
- **Print** – Allows to print data.

PAPER 7 - SECTION – B: STRATEGIC MANAGEMENT

Question paper comprises of 5 questions, Answer Question No. 6 which is compulsory and any 3 out of the remaining 4 questions.

Question 6

Gautam and Siddhartha two brothers are the owners of a cloth manufacturing unit located in Faridabad. They are doing well and have substantial surplus funds available within the business. They have different approaches regarding corporate strategies to be followed to be more competitive and profitable in future.

Gautam is interested in acquiring another industrial unit located in Faridabad manufacturing stationery items such as permanent markers, notebooks, pencils and pencil sharpeners, envelopes and other office supplies. On the other hand, Siddhartha desires to start another unit to produce readymade garments.

Discuss the nature of corporate strategies being suggested by two brothers and risks involved in it. **(5 Marks)**

Answer

Gautam wishes to diversify in a business that is not related to their existing line of product and can be termed as conglomerate diversification. He is interested in acquiring another industrial unit located in Faridabad manufacturing stationery items such as permanent markers, notebooks, pencils and pencil sharpeners, envelopes and other office supplies, which is not related to their existing product. In conglomerate diversification, the new businesses/ products are disjointed from the existing businesses/products in every way, it is a unrelated diversification. In process/ technology/ function, there is no connection between the new products and the existing ones. Conglomerate diversification has no common thread at all with the firm's present position.

On the other hand, Siddhartha seeks to move forward in the chain of existing product by adopting vertically integrated diversification/ forward integration. The cloth being manufactured by the existing processes can be used as raw material of garments manufacturing business. In such diversification, firms opt to engage in businesses that are related to the existing business of the firm. The firm remains vertically within the same process and moves forward or backward in the chain. It enters specific product/process steps with the intention of making them into new businesses for the firm. The characteristic feature of vertically integrated diversification is that here, the firm does not jump outside the vertically linked product-process chain.

Both types of diversifications have their own risks. In conglomerate diversification, there are no linkages with customer group, customer marketing functions and technology used, which is a risk. In the case of vertical integrated diversification, there is a risk of lack of continued focus on the original business.

Question 7

- (a) *'Strategic Management is not a panacea for all the corporate ills, it has its own pitfalls which can't counter all hindrances and always achieve success'.*

Do you agree with this statement? Discuss.

(5 Marks)

- (b) *What do you understand by 'Competitive Landscape'? What are steps to understand the competitive landscape?*

(5 Marks)

Answer

- (a) It is true that the strategic management is not a panacea for all corporate ills. This is on account of complex multiple forces acting on business organization and limiting its success.

These limitations are on account of following factors:

- ◆ **Environment is highly complex and turbulent.** It is difficult to understand the complex environment and exactly pinpoint how it will shape-up in future. The organisational estimate about its future shape may awfully go wrong and jeopardise all strategic plans.
 - ◆ **Strategic management is a time-consuming process.** Organisations spend a lot of time in preparing, communicating the strategies that may impede daily operations and negatively impact the routine business.
 - ◆ **Strategic management is a costly process.** Strategic management adds a lot of expenses to an organization – particularly to small and medium organisations. Expert strategic planners need to be engaged, efforts are made for analysis of external and internal environments devise strategies and properly implement.
 - ◆ **Competition is unpredictable.** In a competitive scenario, where all organisations are trying to move strategically, it is difficult to clearly estimate the competitive responses to the strategies.
- (b) Competitive landscape is a business analysis which identifies competitors, either direct or indirect. Competitive landscape is about identifying and understanding the competitors and at the same time, it permits the comprehension of their vision, mission, core values, niche market, strengths and weaknesses.

Steps to understand the competitive landscape are:

- (i) **Identify the competitor:** The first step to understand the competitive landscape is to identify the competitors in the firm's industry and have actual data about their respective market share.
- (ii) **Understand the competitors:** Once the competitors have been identified, the strategist can use market research report, internet, newspapers, social media,

industry reports, and various other sources to understand the products and services offered by them in different markets.

- (iii) **Determine the strengths of the competitors:** What are the strength of the competitors? What do they do well? Do they offer great products? Do they utilize marketing in a way that comparatively reaches out to more consumers? Why do customers give them their business?
- (iv) **Determine the weaknesses of the competitors:** Weaknesses (and strengths) can be identified by going through consumer reports and reviews appearing in various media. After all, consumers are often willing to give their opinions, especially when the products or services are either great or very poor.
- (v) **Put all of the information together:** At this stage, the strategist should put together all information about competitors and draw inference about what they are not offering and what the firm can do to fill in the gaps. The strategist can also know the areas which need to be strengthen by the firm.

Question 8

- (a) *What are the characteristics which must be possess by objectives, to be meaningful to serve the intended role?* **(5 Marks)**
- (b) *Explain the prominent areas where the Human Resource Manager can play a strategic role.* **(5 Marks)**

Answer

- (a) Objectives with strategic focus relate to outcomes that strengthen an organization's overall business position and competitive vitality. Objectives, to be meaningful to serve the intended role, must possess the following characteristics:
 - ◆ Objectives should define the organization's relationship with its environment.
 - ◆ Objectives should be facilitative towards achievement of mission and purpose.
 - ◆ Objectives should provide the basis for strategic decision-making.
 - ◆ Objectives should provide standards for performance appraisal.
 - ◆ Objectives should be understandable.
 - ◆ Objectives should be concrete and specific.
 - ◆ Objectives should be related to a time frame.
 - ◆ Objectives should be measurable and controllable.
 - ◆ Objectives should be challenging.
 - ◆ Different objectives should correlate with each other.
 - ◆ Objectives should be set within constraints.

(b) Prominent areas where the Human Resource Manager can play strategic role are as follows:

1. **Providing purposeful direction:** The human resource manager leads people and the organization towards the desired direction involving people. He can ensure harmony between organisational objectives and individual objectives.
2. **Creating competitive atmosphere:** In the present business environment, maintaining competitive position or gains is an important objective of any business. Having a highly committed and competent workforce is very important for getting a competitively advantageous position.
3. **Facilitation of change:** The human resource manager will be more concerned about furthering the organization not just maintaining it. He can devote more time to promote acceptance of change rather than maintaining the status quo.
4. **Managing workforce diversity:** In a modern organization, management of diverse workforce is a great challenge. Workforce diversity can be observed in terms of male and female, young and old, educated and uneducated, unskilled and professional employee and so on. Motivation, maintaining morale and commitment are some of the key tasks that a HR manager can perform.
5. **Empowerment of human resources:** Empowerment involves giving more power to those who, at present, have little control on what they do and little ability to influence the decisions being made around them.
6. **Building core competency:** The human resource manager has an important 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. Organization of business around core competence implies leveraging the limited resources of a firm.
7. **Development of works ethics and culture:** A vibrant work culture will have to be developed in the organizations to create an atmosphere of trust among people and to encourage creative ideas by the people.

Question 9

- (a) *Discuss the leadership roles played by the managers in pushing for good strategy execution.* **(5 Marks)**
- (b) *What do you mean by differentiation strategy? How is it achieved?* **(5 Marks)**

Answer

- (a) A manager as a strategic leader has many different leadership roles to play: visionary, chief entrepreneur and strategist, chief administrator, culture builder, resource acquirer and allocator, capabilities builder, process integrator, crisis solver, spokesperson, negotiator, motivator, arbitrator, policy maker and so on. Managers have five leadership roles to play in pushing for good strategy execution:

1. Staying on top of what is happening, closely monitoring progress, working through issues and obstacles.
 2. Promoting a culture that mobilizes and energizes organizational members to execute strategy and perform at a high level.
 3. Keeping the organization responsive to changing conditions, alert for new opportunities and remain ahead of rivals in developing competitively valuable competencies and capabilities.
 4. Ethical leadership and insisting that the organization conduct its affairs like a model corporate citizen.
 5. Pushing corrective actions to improve strategy execution and overall strategic performance.
- (b) Differentiation strategy is aimed at broad mass market and involves the creation of a product or service that is perceived by the customers as unique. The uniqueness can be associated with product design, brand image, features, technology, dealer network or customer service. Because of differentiation, the business can charge a premium for its product.

Differentiation strategy should be pursued only after a careful study of buyers' needs and preferences to determine the feasibility of incorporating one or more differentiating features into a unique product that features the desired attributes.

To achieve differentiation, following measures can be adopted by an organization:

1. Offer utility for the customers and match the products with their tastes and preferences.
2. Elevate the performance of the product.
3. Offer the promise of high quality product/service for buyer satisfaction.
4. Rapid product innovation.
5. Taking steps for enhancing image and its brand value.
6. Fixing product prices based on the unique features of the product and buying capacity of the customer.

Question 10

- (a) *What is Benchmarking? Explain the various steps in Benchmarking process.* (7 Marks)
- (b) *What is an Hourglass structure? How is it beneficial for an organization?* (3 Marks)

OR

Distinguish between Strategy Formulation and Strategy Implementation. (3 Marks)

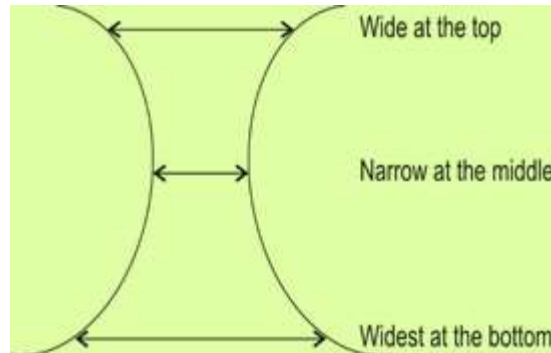
Answer

- (a) Benchmarking is an approach of setting goals and measuring productivity of firms based on best industry practices or against the products, services and practices of its competitors or other acknowledged leaders in the industry. It 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 a process of continuous improvement in search for competitive advantage. Firms can use benchmarking practices to achieve improvements in diverse range of management functions like product development, customer services, human resources management, etc.

The various steps in Benchmarking Process are as under:

- (i) **Identifying the need for benchmarking:** This step will define the objectives of the benchmarking exercise. It will also involve selecting the type of benchmarking. Organizations identify realistic opportunities for improvements.
 - (ii) **Clearly understanding existing decisions processes:** The step will involve compiling information and data on performance.
 - (iii) **Identify best processes:** Within the selected framework best processes are identified. These may be within the same organization or external to them.
 - (iv) **Comparison of own process and performance with that of others:** Benchmarking process also involves comparison of performance of the organization with performance of other organization. Any deviation between the two is analysed to make further improvements.
 - (v) **Prepare a report and implement the steps necessary to close the performance gap:** A report on benchmarking initiatives containing recommendations is prepared. Such a report also contains the action plans for implementation.
 - (vi) **Evaluation:** Business organizations evaluate the results of the 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 impact the performance.
- (b) In the recent years information technology and communications have significantly altered the functioning of organizations. The role played by middle management is diminishing as the tasks performed by them are increasingly being replaced by the technological tools. Hourglass organization structure consists of three layers in an organisation structure with constricted middle layer. The structure has a short and narrow middle management level.

Information technology links the top and bottom levels in the organization taking away many tasks that are performed by the middle level managers. A shrunken middle layer coordinates diverse lower level activities.



Hourglass Organization Structure

Hourglass structure has obvious benefit of reduced costs. It also helps in enhancing responsiveness by simplifying decision making. Decision making authority is shifted close to the source of information so that it is faster. However, with the reduced size of middle management, the promotion opportunities for the lower levels diminish significantly.

OR

Although inextricably linked, strategy implementation is fundamentally different from strategy formulation in the following ways:

Strategy Formulation	Strategy Implementation
<ul style="list-style-type: none"> ◆ Strategy formulation focuses on effectiveness. ◆ Strategy formulation is primarily an intellectual process. ◆ Strategy formulation requires conceptual intuitive and analytical skills. ◆ Strategy formulation requires coordination among the executives at the top level. 	<ul style="list-style-type: none"> ◆ Strategy implementation focuses on efficiency. ◆ Strategy implementation is primarily an operational process. ◆ Strategy implementation requires motivation and leadership skills. ◆ Strategy implementation requires coordination among the executives at the middle and lower levels.