

(GI-1, GI-2, VI-VDI-SI-1,2)

DATE: 21.09.2022

MAXIMUM MARKS: 100

TIMING: 3¼ Hours

EIS & SM**SECTION – A : ENTERPRISE INFORMATION SYSTEMS AND MANAGEMENT****Q. No. 1 & 2 is Compulsory,****Answer any three questions from the remaining four questions****Answer 1:**

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

Answer 2:

The 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 they consistently operate accurately within the defined timeline. It gives visibility of the process status to the organization.
- ◆ Improved Operational Efficiency: Automation reduces the time it takes to achieve a task, the effort required to undertake it and the cost of completing it successfully. Automation not only ensures systems run smoothly and efficiently, but that errors are eliminated and that best practices are constantly leveraged.
- ◆ 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: This relates to elimination of unnecessary tasks and realignment process steps to optimize the flow of information throughout production, service, billing and collection. This adjustment of processes distils 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.

{1 M Each
for Any 5
points}

Answer 3:

(a) Protecting Operating System Access is extremely crucial and can be achieved using following steps:

- **Automated terminal identification:** This will help to ensure that a specified session could only be initiated from a certain location or computer terminal.
- **Terminal log-in procedures:** A log-in procedure is the first line of defense against unauthorized access as it does not provide unnecessary help or information, which could be misused by an intruder. When the user initiates the log-on process by entering user-id and password; the system compares the ID and password to a database of valid users and accordingly authorizes the log-in.
- **Access Token:** If the log on attempt is successful, the Operating System creates an access token that contains key information about the user including user-id, password, user group and privileges granted to the user. The information in the access token is used to approve all actions attempted by the user during the session.
- **Access Control List:** This list contains information that defines the access privileges for all valid users of the resource. When a user attempts to access a resource, the system compares his or her user-id and privileges contained in the access token with those contained in the access control list. If there is a match, the user is granted access.
- **Discretionary Access Control:** The system administrator usually determines who is granted access to specific resources and maintains the access control list. In distributed systems, resources may be controlled by the end-user in which they may be granted discretionary access control, which allows them to grant access privileges to other users. For example, the controller who is owner of the general ledger grants read only privilege to the budgeting department while accounts payable manager is granted both read and write permission to the ledger.
- **User identification and authentication:** The users must be identified and authenticated in a foolproof manner. Depending on risk assessment, more stringent methods like Biometric Authentication or Cryptographic means like Digital Certificates should be employed.
- **Password management system:** An operating system could enforce selection of good passwords. Internal storage of password should use one-way hashing algorithms and the password file should not be accessible to users.
- **Use of system utilities:** System utilities are the programs that help to manage critical functions of the operating system e.g. addition or deletion of users. Obviously, this utility should not be accessible to a general user. Use and access to these utilities should be strictly controlled and logged.
- **Duress alarm to safeguard users:** If users are forced to execute some instruction under threat, the system should provide a means to alert the authorities.
- **Terminal time out:** Log out the user if the terminal is inactive for a defined period. This will prevent misuse in absence of the legitimate user.
- **Limitation of connection time:** Define the available time slot. Do not allow any transaction beyond this time. For example, no computer access after 8.00 p.m. and before 8.00 a.m. - or on a Saturday or Sunday.

{1 M Each
for Any 6
points}

Answer:

(b) Various Front-end applications of core banking systems are as follows:

- **Internet Banking** also known as Online Banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website accessed through any browser. The online banking system offers over 250+ services and facilities that give us real-time access to our bank account. We can make and receive payments to our bank accounts, open Fixed and Recurring Deposits, view account details, request a cheque book and a lot more, while you are online.
- **Mobile Banking** is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a smartphone or tablet. Unlike the related internet banking, it uses software, usually called an app, provided by the financial institution for the purpose. The app needs to be downloaded to utilize this facility. Mobile banking is usually available on a 24-hour basis.
- **Phone Banking:** It is a functionality through which customers can execute many of the banking transactional services through Contact Centre of a bank over phone, without the need to visit a bank branch or ATM. Registration of Mobile number in account is one of the basic prerequisite to avail Phone Banking. The use of telephone banking services, however, has been declining in favor of internet banking. Account related information, Cheque Book issue request, stop payment of cheque, Opening of Fixed deposit etc. are some of the services that can be availed under Phone Banking.
- **Branch Banking:** Core Banking Systems are the bank's centralized systems that are responsible for ensuring seamless workflow by automating the frontend and backend processes within a bank. CBS enables single view of customer data across all branches in a bank and thus facilitate information across the delivery channels. The branch confines itself to the following key functions:
 - Creating manual documents capturing data required for input into software;
 - Internal authorization;
 - Initiating Beginning-Of-Day (BOD) operations;
 - End-Of-Day (EOD) operations; and
 - Reviewing reports for control and error correction.

{1 M Each}

Answer 4:

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

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

Payments is as follows:

- (i) **Unified Payment Interface (UPI):** UPI is a payment mode which is used to make fund transfers through the mobile app. UPI App is a system that powers multiple bank accounts of participating banks, several banking services features like fund transfer, and merchant payments in a single

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

{1 M Each}

Answer:**(b)** Advantages of using Web applications are as follows:

- **Installation and Maintenance:** As software is installed on only one computer, i.e. a web server, it need not be installed on each computer. Hence, installation on user computer is not required and maintenance and updating of software becomes extremely easy.
 - **Accessibility:** As software is not installed on the hard disc of user's computer and it is used through browser and internet, it can be used from any computer in the world. Access to the software becomes very easy.
 - **Mobile Application:** Using mobile application becomes very easy as data is available 24 x 7.
- Disadvantages of using Web applications are as follows:
- **Data Storage:** Data is not stored in the user's server computer. It is stored on a web server. Hence user will not have any control over the data.

{1 M Each
for Any 4
points}

- **Data Security:** Data security is a big challenge in case of web application as the data is not in control of the user or owner of data. It is maintained on a web server.
- **Performance:** As data is picked from web server using internet, speed of operation may be slower in web applications.
- **Flexibility:** Web applications do not even compare to the flexibility of desktop applications. If a user wants to write a web application that basically interacts with the user’s hardware, installed/desktop applications are preferable.

Answer 5:

(a) In computer systems, the levels at which the controls shall be checked are as follows:

(i) **Configuration:** Configuration refers to the way a software system is set up. It is the methodical process of defining options that are provided during system setup. When any software is installed, values for various parameters should be set up (configured) as per policies and business process work-flow and business process rules of the enterprise. The various modules of the enterprise such as Purchase, Sales, Inventory, Finance, User Access etc. must be configured. Configuration will define how software will function and what menu options are displayed.

Some examples of configuration are given below:

- ◆ Mapping of accounts to front end transactions like purchase and sales
- ◆ Control on parameters: Creation of Customer Type, Vendor Type, year-end process
- ◆ User activation and deactivation
- ◆ User Access & privileges - Configuration & its management
- ◆ Password Management

(ii) **Masters:** It refer to the way various parameters are set up for all modules of software like Purchase, Sales, Inventory, and Finance etc. These drive how the software will process relevant transactions. The masters are set up first time during installation and these are changed whenever the business process ru les or parameters are changed. The way masters are set up will drive the way software will process transactions of that type.

Some examples of masters are given here:

- ◆ **Vendor Master:** Credit period, vendor bank account details, etc.
- ◆ **Customer Master:** Credit limit, Bill to address, Ship to address, etc.
- ◆ **Material Master:** Material type, Material description, Unit of measure, etc.
- ◆ **Employee Master:** Employee name, designation, salary details, etc.

(iii) **Transactions:** It refers to the actual transactions entered through menus and functions in the application software, through which all transactions for specific modules are initiated, authorized, or approved.

For example: Sales transactions Purchase transactions, Stock transfer transactions, Journal entries and Payment transactions.

Answer :

(b) Risks and Controls around the CASA Process of Current and Savings Account (CASA) Process are as follows:

Risk	Key Controls
Credit Line setup is unauthorized and not in line with the banks	The credit committee checks that the Financial Ratios, the Net-worth, the Risk

policy.	factors and its corresponding mitigating factors, the Credit Line offered and the Credit amount etc. is in line with Credit Risk Policy and that the Client can be given the Credit Line.
Credit Line setup in CBS is unauthorized and not in line with the banks policy.	Access rights to authorize the credit limit in case of account setup system should be restricted to authorized personnel.
Customer Master defined in CBS is not in accordance with the Pre-Disbursement Certificate.	Access rights to authorize the customer master in CBS should be restricted to authorized personnel.
Inaccurate interest / charge being calculated in CBS.	Interest on fund based facilities are automatically calculated in the CBS as per the defined rules.
Unauthorized personnel approving the CASAS transaction in CBS.	Segregation of Duties to be maintained between the initiator and authorizer of the transaction for processing transaction in CBS.
Inaccurate accounting entries generated in CBS.	Accounting entries are generated by CBS basis the facilities requested by the customer and basis defined configurations for those facilities in CBS.

{1 M Each for Any 5 points}

Answer 6:

(a) Some of the questions auditors should ask during an ERP audit are pretty much the same as those that should be asked during development and implementation of the system:

- Does the system process according to GAAP (Generally Accepted Accounting Principles) and GAAS (Generally Accepted Auditing Standards)?
- Does it meet the needs for reporting, whether regulatory or organizational?
- Were adequate user requirements developed through meaningful interaction?
- Does the system protect confidentiality and integrity of information assets?
- Does it have controls to process only authentic, valid, accurate transactions?
- Are effective system operations and support functions provided?
- Are all system resources protected from unauthorized access and use?
- Are user privileges based on what is called "role-based access?"
- Is there an ERP system administrator with clearly defined responsibilities?
- Is the functionality acceptable? Are user requirements met? Are users happy?
- Have workarounds or manual steps been required to meet business needs?
- Are there adequate audit trails and monitoring of user activities?
- Can the system provide management with suitable performance data?
- Are users trained? Do they have complete and current documentation?
- Is there a problem-escalation process?

{1/2 M Each for Any 12 points}

Answer:

(b) 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.

**{1 M Each
for Any 4
points}**

SECTION – B : STRATEGIC MANAGEMENT

Q. No. 7 & 8 is Compulsory,

Answer any three questions from the remaining four questions

Answer 7:

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

{1 M Each}

Answer 8:

It is not advisable for any organisation to take things as they come. Organisations whether commercial or non-commercial need proper planning. In fact, the strategic management process is being used effectively by countless non-profit governmental organizations. Many non-profit and governmental organizations outperform private firms and corporations on innovativeness, motivation, productivity, and human relations. Compared to for-profit firms, non-profit and governmental organizations often function as a monopoly, produce a product or service that offers little or no measurability of performance, and are totally dependent on outside financing. Especially for these organizations, strategic

{2 M}

management provides an excellent vehicle for developing and justifying requests for needed financial support. }

Rohit needs to understand the importance of strategic management in his organisation. His organisation is also depended on funds from government and donations. On one side, he needs to maintain steady inflow of funds and on the other side he needs to ensure proper utilisation of funds. } {2 M}

He can plan to use funds in a manner to maintain similar level of continuous services. With proper planning, resources can be better utilised, more funds can be generated and the quality of services maintained. } {1 M}

Answer 9:

(a) Leading change has to start with diagnosing the situation and then deciding which of several ways to handle it. Managers have five leadership roles to play in pushing for good strategy execution:

- (i) Staying on top of what is happening, closely monitoring progress, solving out issues, and learning what obstacles lie in the path of good execution.
 - (ii) Promoting a culture of esprit de corps that mobilizes and energizes organizational members to execute strategy in a competent fashion and perform at a high level.
 - (iii) Keeping the organization responsive to changing conditions, alert for new opportunities, bubbling with innovative ideas, and ahead of rivals in developing competitively valuable competencies and capabilities.
 - (iv) Exercising ethical leadership and insisting that the company conduct its affairs like a model corporate citizen.
 - (v) Pushing corrective actions to improve strategy execution and overall strategic performance.
- } {1 M Each}

Answer:

(b) A strategic group consists of those rival firms which have similar competitive approaches and positions in the market. Companies in the same strategic group can resemble one another in any of the several ways – have comparable product-line breadth, same price/quality range, same distribution channels, same product attributes, identical technological approaches, offer similar services and technical assistance and so on. } {1 M}

The procedure for constructing a strategic group map and deciding which firms belong in which strategic group is as follows:

- ◆ Identify the competitive characteristics that differentiate firms in the industry typical variables are price/quality range (high, medium, low); geographic coverage (local, regional, national, global); degree of vertical integration (none, partial, full); product- line breadth (wide, narrow); use of distribution channels (one, some, all); and degree of service offered (no-frills, limited, full).
 - ◆ Plot the firms on a two-variable map using pairs of these differentiating characteristics.
 - ◆ Assign firms that fall in about the same strategy space to the same strategic group.
 - ◆ Draw circles around each strategic group making the circles proportional to the size of the group’s respective share of total industry sales revenues.
- } {1 M Each}

Answer 10:

(a) Soft Cloth Ltd. is facing internal as well as external challenges. The external environment is in economic recession and the organization is facing cash crunch. The company needs to work on retrenchment / turnaround strategy. The strategy is suitable in case of issues such as: {1 M}

- ◆ Persistent negative cash flow.
 - ◆ Uncompetitive products or services
 - ◆ Declining market share
 - ◆ Deterioration in physical facilities
 - ◆ Overstaffing, high turnover of employees, and low morale
 - ◆ Mismanagement
- {1/2 M Each}

The company may consider to substantially reduce the scope of its activity. This is done through an attempt to find out the problem areas and diagnose the causes of the problems. Next, steps are taken to solve the problems. These steps result in different kinds of retrenchment strategies. If the organization chooses to focus on ways and means to reverse the process of decline, it adopts a turnaround strategy. If it cuts off the loss-making units, divisions, or SBUs, curtails its product line, or reduces the functions performed, it adopts a divestment strategy. If none of these actions work, then it may choose to abandon the activities totally, resulting in a liquidation strategy. {1 M}

Answer:

(b) 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. Modern marketing is highly promotional oriented. Ronit needs to cover four major direct promotional methods or tools – personal selling, advertising, publicity and sales promotion. They are briefly explained as follows: {1 M}

- (i) **Personal selling:** Personal Selling 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. Ronit may engage a sales team to reach potential customers, explain the benefits of the product and make a sale. While personal selling is highly effective it suffers from very high costs as sales personnel are expensive. Considering the product is a new launch in a competitive environment having a sales team would be essential.
- (ii) **Advertising:** Advertising is a non-personal, highly flexible and dynamic promotional method. Ronit needs to advertise washing powder through hoardings, display boards particularly near the point of sale. He may also consider having advertisements through handouts, newspapers, magazines and internet. Television and radio are costly alternatives that may be considered according to his budget. {1 M Each for Any 4 points}
- (iii) **Publicity:** Publicity is also a non-personal form of promotion similar to advertising. He may organize a launch party where journalists are invited. It is 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. Ronit may offer free trial packs to generate interest in the product. Activities like discounts, contests, money refunds, instalments, kiosks, exhibitions and fairs constitute sales promotion. All these are meant to give a boost to the sales. Sales promotion done periodically may help in getting a larger market share.

Answer 11:

- (a) Implementation and execution are an operations-oriented activity aimed at shaping the performance of core business activities in a strategy-supportive manner. To convert strategic plans into actions and results, a manager must be able to direct organizational change, motivate people, build and strengthen company's competencies and competitive capabilities, create a strategy-supportive work culture, and meet or beat performance targets. Good strategy execution involves creating strong "fits" between strategy and organizational capabilities, structure, climate & culture. {1 M}

In most situations, strategy-execution process includes the following principal aspects:

1. **Developing budgets** that steer ample resources into those activities critical to strategic success.
 2. **Staffing the organization with the needed skills and expertise**, consciously building and strengthening strategy-supportive competencies and competitive capabilities and organizing the work effort.
 3. **Ensuring that policies and operating procedures facilitate rather than impede effective execution.**
 4. **Using the best-known practices** to perform core business activities and pushing for continuous improvement.
 5. **Installing information and operating systems** that enable company personnel to better carry out their strategic roles day in and day out.
 6. **Motivating people** to pursue the target objectives energetically.
 7. **Creating a company culture and work climate conducive** to successful strategy implementation and execution.
 8. **Exerting the internal leadership needed to drive implementation forward and keep improving strategy execution.** When the organization encounters stumbling blocks or weaknesses, management has to see that they are addressed and rectified quickly.
- {1/2 M Each for Any 8 points}

Answer:

- (b) Mr Dutta should adopt business process reengineering (BPR). It is an approach to unusual improvement in operating effectiveness through the redesigning of critical business processes and supporting business systems. It is revolutionary redesign of key business processes that involves examination of the basic process itself. BPR refers to the analysis and redesign of workflows and processes both within the organization and between the organization and the external entities like suppliers, distributors, and service providers. {1 M}
- The orientation of redesigning efforts involves total deconstruction and rethinking of business process BPR involves the following steps:
- i. **Determining objectives:** Objectives are the desired end results of the redesign process. They will provide the required focus, direction, and motivation for the redesign process and help in building a comprehensive foundation for the reengineering process.

- ii. Identify customers and determine their needs: The process designers have to understand customers. The purpose is to redesign business process that clearly provides value addition to the customer.
- iii. Study the existing processes: The study of existing processes will provide an important base for the process designers. The purpose is to gain an understanding of the 'what', and 'why' of the targeted process.
- iv. Formulate a redesign process plan: Formulation of redesign plan is the real crux of the reengineering efforts. Customer focussed redesign concepts are identified and formulated. In this step alternative processes are considered and the best is selected.
- v. Implement the redesigned process: It is easier to formulate new process than to implement them. Implementation of the redesigned process and application of other knowledge gained from the previous steps is key to achieve dramatic improvements.

{1 M Each
for Any 4
points}

Answer 12:

(a) Atrix is having a product portfolio that is evidently in the decline stage. The product is being replaced with the technologically superior product. Strategically the company should minimize their dependence on the existing products and identify other avenues for the survival and growth. As a CEO of Atrix Ltd., following can be the strategic options available with the CEO:

{1 M}

- Invest in new product development and switchover to the new technology. Atrix Ltd. also need time to invest in emerging new technology.
- They can acquire or takeover a competitor, provided they have or are able to generate enough financial resources.
- They may also consider unrelated growth and identify other areas for expansion. This will enable Atrix Ltd. to spread their risks.
- In longer run, they should divest the existing products. However, they may continue with the existing products in a limited manner for such time there is demand for the product.

{1 M Each}

Answer:

(b) A firm's profitability tends to be higher when other firms are blocked from entering the industry. New entrants can reduce industry profitability because they add new production capacity leading to increase supply of the product even at a lower price and can substantially erode existing firm's market share position. Barriers to entry represent economic forces that slow down or impede entry by other firms. Common barriers to entry include:

- (i) **Capital Requirements:** When a large amount of capital is required to enter an industry, firms lacking funds are effectively barred from the industry, thus enhancing the profitability of existing firms in the industry.
- (ii) **Economies of Scale:** Many industries are characterized by economic activities driven by economies of scale. Economies of scale refer to the decline in the per-unit cost of production (or other activity) as volume grows.
- (iii) **Product Differentiation:** Product differentiation refers to the physical or perceptual differences, or enhancements, that make a product special or unique in the eyes of customers.
- (iv) **Switching Costs:** To succeed in an industry, new entrant must be able to persuade existing customers of other companies to switch to its products. When such switching costs are high, buyers are often reluctant to change.

{1 M Each
for Any 5
points}

- (v) **Brand Identity:** The brand identity of products or services offered by existing firms can serve as another entry barrier. Brand identity is particularly important for infrequently purchased products that carry a high unit cost to the buyer.
- (vi) **Access to Distribution Channels:** The unavailability of distribution channels for new entrants poses another significant entry barrier. Despite the growing power of the internet, many firms may continue to rely on their control of physical distribution channels to sustain a barrier to entry to rivals.
- (vii) **Possibility of Aggressive Retaliation:** Sometimes the mere threat of aggressive retaliation by incumbents can deter entry by other firms into an existing industry.

—**—