Test Series: September, 2023

MOCK TEST PAPER 1

INTERMEDIATE GROUP – II

PAPER – 7: ENTERPRISE INFORMATION SYSTEMS AND STRATEGIC MANAGEMENT

SECTION – A: Enterprise Information Systems

Time Allowed – 1½ Hours **Maximum Marks: 50 Marks**

ANSWERS

PART I: MULTIPLE CHOICE QUESTIONS

1. **(d)** Treat the risk

2. **(a)** Data Mining

3. **(b)** Section 43A

4. **(c)** Resiliency

5. **(b)** System Control Audit Review File (SCARF)

6. **(c)** Business Process Automation

7. **(c)** Journal

8. **(b)** Concurrent Audit

9. **(b)** Desktop as a Service

10. **(c)** Market Risk

PART II: DESCRIPTIVE QUESTIONS

1. **(a)** **Application Controls** are controls which are implemented in an application to prevent or detect and correct errors. These controls are in-built in the application software to ensure accurate and reliable processing. These are designed to ensure completeness, accuracy, authorization and validity of data capture and transaction processing. For example: In banking, application software ensures that only transactions of the day are accepted by the system. Withdrawals are not allowed beyond limits, etc.

Some examples of Application controls are as follows-

- Data edits (editing of data is allowed only for permissible fields).
- Separation of business functions (e.g., transaction initiation versus authorization).
- Balancing of processing totals (debit and credit of all transactions are tallied).
- Transaction logging (all transactions are identified with unique id and logged).
- Error reporting (errors in processing are reported).
- Exception Reporting (all exceptions are reported).

(b) **Cache memory** is a smaller, extremely fast memory type built into a computer's Central Processing Unit (CPU) and that acts as a buffer between RAM and the CPU. Cache Memory stores copies of the data from the most frequently used main memory locations so that CPU can access it more rapidly than main memory.

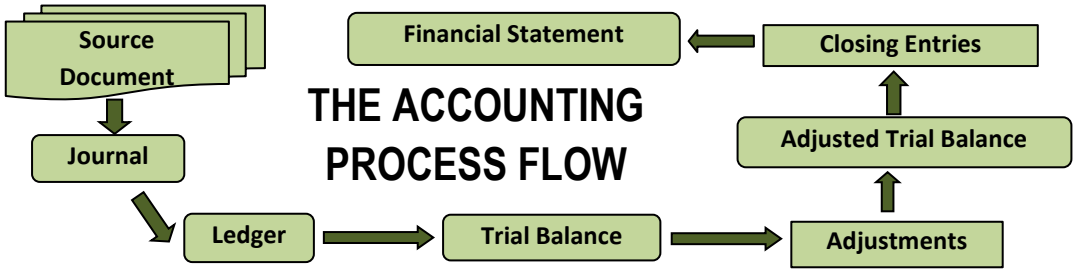
2. **(a)** Data is generally moved synchronously across telecommunication lines, however such data that is waiting to be transmitted are liable to unauthorized access called **Asynchronous Attacks**. These kinds of attacks make use of the timing difference between the time when the data is inputted to the system and the time when it gets processed by the system. These attacks are hard to detect because they are usually very small pin like insertions and are of following types:

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

(b) Various risks that are associated with the Current Account and Savings Account (CASA) process of Core Banking Systems (CBS) are as follows:

- Credit Line setup is unauthorized and not in line with the bank's policy.
- Credit Line setup in CBS is unauthorized and not in line with the bank's policy.
- Customer Master defined in CBS is not in accordance with the Pre-Disbursement Certificate.
- Inaccurate interest/charge being calculated in CBS.
- Unauthorized personnel approving the CASA transaction in CBS.
- Inaccurate accounting entries generated in CBS.

3. **(a)** **Accounting or Book-keeping** cycle covers the business processes involved in recording and processing accounting events of a company. It begins when a transaction or financial event occurs and ends with its inclusion in the financial statements. A typical life cycle of an accounting transaction may include the following transactions:



- **Source Document:** A document that captures data from transactions and events.
- **Journal:** Transactions are recorded into journals from the source document.
- **Ledger:** Entries are posted to the ledger from the journal. 1
- **Trial Balance:** Unadjusted trial balance containing totals from all account heads is prepared.

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- **Adjustments:** Appropriate adjustment entries are passed.
- **Adjusted Trial balance:** The trial balance is finalized post adjustments.
- **Closing Entries:** Appropriate entries are passed to transfer accounts to financial statements.
- **Financial statement:** The accounts are organized into the financial statements.

(b) **Hardware Virtualization:** Hardware Virtualization refers to the creation of a virtual machine that acts like a real computer with an operating system. Software executed on these virtual machines is separated from the underlying hardware resources. This enables the users to run different operating systems on the same machine simultaneously. For example, a computer that is running Microsoft Windows may host a virtual machine that looks like a computer with the Linux operating system-based software that can be run on the virtual machine.

The basic idea of hardware virtualization is to consolidate many small physical servers into one large physical server so that the processor can be used more effectively. The software that creates a virtual machine on the host hardware is called a Hypervisor that controls the processor, memory, and other components by allowing several different operating systems to run on the same machine without the need for a source code. The operating system running on the machine will appear to have its own processor, memory and other components.

Storage Virtualization: Storage Virtualization is an apparent pooling of data from multiple storage devices, even different types of storage devices into what appears to be a single device that is managed from a central console. Storage virtualization helps the storage administrator perform the tasks of backup, archiving, and recovery more easily and in less time by disguising the actual complexity of a Storage Area Network (SAN). Administrators can implement virtualization with software applications or by using hardware and software hybrid appliances. The servers connected to the storage system are not aware of where the data really is. Storage virtualization is sometimes described as “abstracting the logical storage from the physical storage”.

4. **(a)** The steps involved in the process of Data Mining are as follows:

- **Data Integration:** Firstly, the data are collected and integrated from all the different sources which could be flat files, relational database, data warehouse or web etc.
- **Data Selection:** It may be possible that all the data collected may not be required in the first step. So, in this step we select only those data which we think is useful for data mining.
- **Data Cleaning:** The data that is collected are not clean and may contain errors, missing values, noisy or inconsistent data. Thus, we need to apply different techniques to get rid of such anomalies.
- **Data Transformation:** The data even after cleaning are not ready for mining as it needs to be transformed into an appropriate form for mining using different techniques like - smoothing, aggregation, normalization etc.
- **Data Mining:** In this, various data mining techniques are applied on the data to discover the interesting patterns. Techniques like clustering and association analysis are among the many different techniques used for data mining.
- **Pattern Evaluation and Knowledge Presentation:** This step1 involves visualization, transformation, removing redundant patterns etc. from the patterns we generated.
- **Decisions / Use of Discovered Knowledge:** This step helps user to make use of the knowledge acquired to take better informed decisions.

(b) In Core Banking Systems, **Operational Risk** is defined as a risk arising from direct or in direct loss to the bank which could be associated with inadequate or failed internal process, people, and systems. For example- Inadequate audits, improper management, ineffective internal control procedures etc. Various types of Operational Risk are as follows:

- **Transaction Processing Risk** arises because faulty reporting of important market developments to the bank management may occur due to errors in entry of data for subsequent bank computations.
- **Information Security Risk** comprises the impact to an organization and its stakeholders that could occur due to the threats and vulnerabilities associated with the operation and use of information systems and the environments in which those systems operate. Data breaches can cost a bank its reputation, customers can lose time and money and above all their confidential information.
- **Legal Risk** arises because of the treatment of clients, the sale of products, or business practices of a bank. There are countless examples of banks being taken to court by disgruntled corporate customers, who claim they were misled by advice given to them or business products sold. Contracts with customers may be disputed.
- **Compliance Risk** is exposure to legal penalties, financial penalty, and material loss an organization faces; when it fails to act in accordance with industry laws and regulations, internal policies or prescribed best practices.
- **People Risk** arises from lack of trained key personnel, tampering of records, unauthorized access to dealing rooms and nexus between front and back-end offices.

5. (a) The risks that are involved in an e-Business environment are as follows:

(i) Privacy and Security: When an organization uses internet to engage in e-commerce, it exposes itself to additional security threats and privacy issues. There are often issues of security and privacy due to lack of personalized digital access and knowledge. The nature of e-commerce operations is an important factor determining the security risks perceptions of any e-commerce installation. For example, if the type of industry is banking and finance, it would require more stringent deployment of security solutions than would be for manufacturing industry.

(ii) Quality issues: There are quality issues raised by customers as the original product differs from the one that was ordered.

(iii) Delay in goods and Hidden Costs: When goods are ordered from another country, the shipment may be delayed due to factors such as port congestion, bad weather, custom clearances, etc. Moreover, e-commerce companies may have these hidden costs.

(iv) Needs access to internet and lack of personal touch: The e-commerce requires an internet connection which is an extra expense and lacks personal touch.

(v) Security and Credit card issues: The credit card and debit card information may be stolen and misused which poses a security threat. There is also possibility of cloning of credit cards and debit cards.

(vi) Infrastructure: There is a greater need of not only digital infrastructure but also network expansion of roads and railways which remains a substantial challenge in developing countries.

(vii) **Problem of anonymity:** There is a need to identify and authenticate users in the virtual global market where anyone can sell to or buy from anyone, anything from anywhere.

(viii) **Repudiation of contract:** There is possibility that the electronic transaction in the form of contract, sale order or purchase by the trading partner or customer may be denied.

(ix) **Lack of authenticity of transactions:** The electronic documents that are produced during an e-commerce transaction may not be authentic and reliable.

(x) **Data Loss or theft or duplication:** The data transmitted over the Internet may be lost, duplicated, tampered with, or replayed.

(xi) **Attack from hackers:** Web servers used for e-commerce may be vulnerable to hackers. A hacker is an unauthorized user who attempts to or gains access to the system with/without the intention to steal or modify data or to insert viruses or worms to cause damage to the system.

(xii) **Denial of Service:** Service to customers may be denied due to non-availability of system as it may be affected by viruses, e-mail bombs and by transmitting so many data packets to a server that it cannot process them all. The denial of service may cause a network to shut down, making it impossible for users to access the site. For busy e-commerce sites such as Flipkart, these attacks are costly; while the site is shut down, customers cannot make purchases. Moreover, the longer a site is shut down, the more damage is done to a site's reputation.

(xiii) **Non-recognition of electronic transactions:** e-Commerce transactions, as electronic records and digital signatures may not be recognized as evidence in courts of law in some countries.

(xiv) **Lack of audit trails:** Audit trails in e-Commerce system may be lacking and the logs may be incomplete, too voluminous, or easily tampered with.

(xv) **Problem of piracy:** Intellectual property such as copyright may not be adequately protected when such property is transacted through e-Commerce.

(b) Various aspects that an auditor shall consider while auditing the processes of an Enterprise Resource Planning (ERP) are as follows:

- **Functional Audit –** This includes testing of different functions / features in the system and testing of the overall process or part of process in the system and its comparison with actual process. For example - Purchase Process, Sales Process, Salary Calculation Process, Recruitment Process, etc. Auditor may check this process in the system and compare it with actual process. It is quite possible that all the aspect present in the actual process may not be integrated in the ERP system. There may be some manual intervention.
- **Input Validation –** This stand for checking of rules for input of data into the system. For example - a transaction of cash sales on sales counter must not be recorded in a date other than today (not a future date or a back date), amount field must not be zero, stock item field shall not be empty, etc. Input validations shall change according to each data input form.

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SECTION – B: STRATEGIC MANAGEMENT

SUGGESTED ANSWERS/HINTS

1. (A)

(1)	(2)	(3)	(4)	(5)
(b)	(c)	(d)	(a)	(c)

(B) (b)

(C) (a)

(D) (b)

(E) (d)

(F) (b)

(G) (b)

2. Sandeep group of companies have used **Benchmarking** as a strategic tool. 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. Thus, benchmarking is a process of continuous improvement in search for competitive advantage. Firms can use benchmarking practices to achieve improvements in a diverse range of management functions like product development, customer services, human resources management, etc.

Some of the common elements of benchmarking process are as under:

- **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.
- **Clearly understanding existing decisions processes:** The step will involve compiling information and data on performance. This will include mapping processes.
- **Identify best processes:** Within the selected framework best processes are identified. These may be within the same organization or external to it.
- **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.
- **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.
- **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 resets the benchmarks in the light of changes in the conditions that impact the performance.

3. (a) Expansion strategy is implemented by redefining the business by adding to the scope of business substantially increasing the efforts of the current business. On the other hand, Retrenchment strategy involves redefinition of business by divesting a major product line or market.

Expansion is a promising and popular strategy that tends to be equated with dynamism, vigour, promise and success. Retrenchment or retreat becomes necessary or expedient for coping with particularly hostile and adverse situations in the environment and when any other strategy is likely to be suicidal.

Expansion may take the enterprise along relatively unknown and risky paths, full of promises and pitfalls. Retrenchment involves regrouping and recouping of the resources.

(b) SWOT analysis is a tool used by organizations for evolving strategic options for the future. The term SWOT refers to the analysis of strengths, weaknesses, opportunities and threats facing a company. Strengths and weaknesses are identified in the internal environment, whereas opportunities and threats are located in the external environment.

(a) **Strength:** Strength is an inherent capability of the organization which it can use to gain strategic advantage over its competitor.

(b) **Weakness:** A weakness is an inherent limitation or constraint of the organisation which creates strategic disadvantage to it.

(c) **Opportunity:** An opportunity is a favourable condition in the external environment which enables it to strengthen its position.

(d) **Threat:** An unfavourable condition in the external environment which causes a risk for, or damage to the organisation's position.

The major purpose of SWOT analysis is to enable the management to create a firm-specific business model that will best align, fit or match an organisational resources and capabilities to the demands of the environment in which it operates.

4. (a) The role of Chief Executive Officer pertains to corporate level.

The corporate level of management consists of the Chief Executive Officer (CEO) and other top-level executives. These individuals occupy the apex of decision making within the organization.

The role of Chief Executive Officer is to:

1. oversee the development of strategies for the whole organization;
2. defining the mission and goals of the organization;
3 determining what businesses, it should be in;
4. allocating resources among the different businesses;
5. formulating, and implementing strategies that span individual businesses;
6. providing leadership for the organization;
7. ensuring that the corporate and business level strategies which company pursues are consistent with maximizing shareholders wealth; and
8. managing the divestment and acquisition process.

(b) 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 Jauch 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."**

The primary task of the strategic manager is conceptualizing, designing and executing company strategies. For this purpose, his tasks include:

- Defining the mission and goals of the organization.
- Determining what businesses, it should be in. 1
- Allocating resources among the different businesses.
- Formulating and implementing strategies that span individual businesses.

- ♦ Providing leadership for the organization.

5. (a) Budget Smart Retailers adopted a **cost leadership strategy** to enhance profitability in the fiercely competitive grocery retail sector. It is a low-cost competitive strategy that aims at broad mass market. It requires vigorous pursuit of cost reduction in the areas of procurement, production, storage and distribution of product or service and also economies in overhead costs. Because of its lower costs, the cost leader is able to charge a lower price for its products than most of its competitors and still earn satisfactory profits.

By negotiating bulk procurement deals with suppliers, BudgetSmart Retailers lowered their cost of goods, allowing them to offer competitive prices to customers. The revamping of store layouts aimed to maximize space utilization and product placement, reducing operational costs and improving the overall shopping experience. Embracing lean principles minimized waste in the supply chain, reducing unnecessary expenses and improving efficiency. Comprehensive staff training boosted employee productivity and customer service efficiency, contributing to cost reduction and enhanced customer satisfaction.

(b) Modern marketing is highly promotional oriented and includes personal selling, advertising, publicity and sales promotion.

Personal selling – involves face to face interaction of salespersons with prospective customers and provides a high degree of personal attention. It involves working with one customer at a time and hence is not cost effective. The intention of oral communication is sale.

Advertising – is a non-personal, flexible and dynamic promotion method. The media for advertising are several and choice of an appropriate one is important for effectiveness of message. The sales of the product and the amount of expenditure cannot be directly measured.

Publicity – is also non-personal but no payments are made to the media. 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. It could be through press releases, press conferences, reports, etc.

Sales promotion – 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, exhibitions etc. are included.

6. (a) 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 organization, 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 organizations 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.

(b) Suraj Prakesh is a follower of **transactional leadership style** that focuses on designing systems and controlling the organization's activities. Such a leader believes in using the authority of his office to exchange rewards, such as pay and status. They prefer a more formalized approach to motivation, setting clear goals with explicit rewards or penalties for achievement or non-achievement. Transactional leaders try to build on the existing culture and enhance current practices. The style is better suited in persuading people to work efficiently and run operations smoothly.

On the other hand, Chander Prakash is a follower of **transformational leadership style**. The style uses charisma and enthusiasm to inspire people to exert them for the good of the organization. Transformational leaders offer excitement, vision, intellectual stimulation and personal satisfaction. They inspire involvement in a mission, giving followers a 'dream' or 'vision' of a higher calling so as to elicit more dramatic changes in organizational performance. Such a leadership motivates followers to do more than originally affected to do by stretching their abilities and increasing their self-confidence, and also promote innovation throughout the organization.

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