MOCK TEST PAPER - 2

INTERMEDIATE (NEW): GROUP – II

PAPER – 7: ENTERPRISE INFORMATION SYSTEMS AND STRATEGIC MANAGEMENT

SECTION – A: ENTERPRISE INFORMATION SYSTEMS

ANSWERS

MULTIPLE CHOICE QUESTIONS

1. **(b)** 143(3)
2. **(a)** Manufacturing
3. **(b)** RDBMS
4. **(c)** The law is not being able to meet the requirements of technology.
5. **(c)** Integration
6. **(b)** 
7. **(a)** Accounting Information System
8. **(b)** Boss Speakers
9. **(d)** Cash on Delivery
10. **(c)** Proxy

DESCRIPTIVE QUESTIONS

1. **(a)** **Data Warehouse:** Usually this is a module that can be accessed by an organizations customers, suppliers and employees. Data warehouse is a repository of an organization's electronically stored data. Data warehouses are designed to facilitate reporting and analysis. This classic definition of the data warehouse focuses on data storage. However, the means to retrieve and analyze data, to extract, transform and load data, and to manage the data dictionary are also considered essential components of a data warehousing system. An expanded definition for data warehousing includes business intelligence tools, tools to extract, transform, and load data into the repository, and tools to manage and retrieve metadata. In contrast to data warehouses are operational systems which perform day-to-day transaction processing. The process of transforming data into information and making it available to the user in a timely enough manner to make a difference is known as data warehousing.

   (b) **Money Laundering** is the process by which the proceeds of the crime and the true ownership of those proceeds are concealed or made opaque so that the proceeds appear to come from a legitimate source. The objective in money laundering is to conceal the existence, illegal source, or illegal application of income to make it appear legitimate. Money laundering is commonly used by criminals to make "dirty" money appear "clean" or the profits of criminal activities are made to appear legitimate.

2. **(a)** **Validation Controls:** Input validation controls are intended to detect errors in the transaction data before the data are processed. There are three levels of input validation controls:

   - **Field Interrogation:** It involves programmed procedures that examine the characters of the data in the field. The following are some common types of field interrogation. Various field checks used to ensure data integrity have been described below:
     - **Limit Check:** This is a basic test for data processing accuracy and may be applied to both the input and output data. The field is checked by the program against predefined limits to ensure that no input/output error has occurred or at least no input error exceeding certain pre-established limits has occurred.
     - **Picture Checks:** These checks against entry into processing of incorrect/invalid characters.

- **Valid Code Checks:** Checks are made against predetermined transactions codes, tables or order data to ensure that input data are valid. The predetermined codes or tables may either be embedded in the programs or stored in (direct access) files.
- **Check Digit:** One method for detecting data coding errors is a check digit. A check digit is a control digit (or digits) added to the code when it is originally assigned that allows the integrity of the code to be established during subsequent processing. The check digit can be located anywhere in the code, as a prefix, a suffix, or embedded someplace in the middle.
- **Arithmetic Checks:** Simple Arithmetic is performed in different ways to validate the result of other computations of the values of selected data fields.
- **Cross Checks:** may be employed to verify fields appearing in different files to see that the result tally.

- **Record Interrogation:** These are discussed as follows:
  - **Reasonableness Check:** Whether the value specified in a field is reasonable for that particular field?
  - **Valid Sign:** The contents of one field may determine which sign is valid for a numeric field.
  - **Sequence Check:** If physical records follow a required order matching with logical records.
- **File Interrogation:** These are discussed as follows:
  - **Version Usage:** Proper version of a file should be used for processing the data correctly. In this regard, it should be ensured that only the most current file be processed.
  - **Internal and External Labeling:** Labeling of storage media is important to ensure that the proper files are loaded for process. Where there is a manual process for loading files, external labeling is important to ensure that the correct file is being processed. Where there is an automated tape loader system, internal labeling is more important.
  - **Data File Security:** Unauthorized access to data file should be prevented, to ensure its confidentiality, integrity and availability. These controls ensure that the correct file is used for processing.
  - **Before and after Image and Logging:** The application may provide for reporting of before and after images of transactions. These images combined with the logging of events enable re-constructing the data file back to its last state of integrity, after which the application can ensure that the incremental transactions/events are rolled back or forward.
  - **File Updating and Maintenance Authorization:** Sufficient controls should exist for file updating and maintenance to ensure that stored data are protected. The access restrictions may either be part of the application program or of the overall system access restrictions.
  - **Parity Check:** When programs or data are transmitted, additional controls are needed. Transmission errors are controlled primarily by detecting errors or correcting codes.

(b) ERM provides enhanced capability to do the following:

- **Align risk appetite and strategy:** Risk appetite is the degree of risk, on a broad-based level that an enterprise (any type of entity) is willing to accept in pursuit of its goals. Management considers the entity's risk appetite first in evaluating strategic alternatives, then in setting objectives aligned with the selected strategy and in developing mechanisms to manage the related risks.
- **Link growth, risk and return:** Entities accept risk as part of value creation and preservation, and they expect return commensurate with the risk. ERM provides an enhanced ability to identify and assess risks, and establish acceptable levels of risk relative to growth and return objectives.

- **Enhance risk response decisions:** ERM provides the rigor to identify and select among alternative risk responses – risk avoidance, reduction, sharing and acceptance. ERM provides methodologies and techniques for making these decisions.
- **Minimize operational surprises and losses:** Entities have enhanced capability to identify potential events, assess risk and establish responses, thereby reducing the occurrence of surprises and related costs or losses.
- **Identify and manage cross-enterprise risks:** Every entity faces a myriad of risks affecting different parts of the enterprise. Management needs to not only manage individual risks, but also understand interrelated impacts.
- **Provide integrated responses to multiple risks:** Business processes carry many inherent risks, and ERM enables integrated solutions for managing the risks.
- **Seize opportunities:** Management considers potential events, rather than just risks, and by considering a full range of events, management gains an understanding of how certain events represent opportunities.
- **Rationalize capital:** More robust information on an entity's total risk allows management to more effectively assess overall capital needs and improve capital allocation.

3. (a) Business Intelligence (BI) is a technology-driven process for analysing data and presenting actionable information to help corporate executives, business managers and other end users make more informed business decisions.

- BI encompasses a wide variety of tools, that enable organizations to collect data from internal systems and external sources, prepare it for analysis, develop and run queries against the data, and create reports, dashboards and data visualizations to make the analytical results available to corporate decision makers as well as operational workers.
- BI systems can also help companies identify market trends and spot business problems that need to be addressed.
- Business Intelligence uses data from different sources and helps to finds answers to various questions as shown on right hand side of above image.
- BI data can include historical information, as well as new data gathered from source systems as it is generated, enabling BI analysis to support both strategic and tactical decision-making processes.
- Initially, BI tools were primarily used by data analysts and other IT professionals who ran analyses and produced reports with query results for business users. Increasingly, however, business executives and workers are using BI software themselves, thanks partly to the development of self-service BI and data discovery tools.
- Business Intelligence combines a broad set of data analysis applications, including ad hoc analysis and querying, enterprise reporting, Online Analytical Processing (OLAP), mobile BI, real-time BI, operational BI, cloud and software as a service BI, open source BI, collaborative BI and location intelligence.
- BI technology also includes data visualization software for designing charts and other info-graphics, as well as tools for building BI dashboards and performance scorecards that display visualized data on business metrics and key performance indicators in an easy-to-grasp way.
- BI applications can be bought separately from different vendors or as part of a unified BI platform from a single vendor.
- BI programs can also incorporate forms of advanced analytics, such as data mining, predictive analytics, text mining, statistical analysis and big data analytics. In many cases, though, advanced analytics projects are conducted and managed by separate teams of data scientists, statisticians, predictive modelers and other skilled analytics professionals, while BI teams oversee more straightforward querying and analysis of business data.

- Business Intelligence data in terms of unstructured data, log files, sensor data and other types of big data are stored in a data warehouse or smaller data marts that hold subsets of a company's information. Before it's used in BI applications, raw data from different source systems must be integrated, consolidated and cleansed using data integration and data quality tools to ensure that users are analysing accurate and consistent information.

(b) Application Areas of Virtualization are as follows:

- **Server Consolidation:** Virtual machines are used to consolidate many physical servers into fewer servers, which in turn host virtual machines. Each physical server is reflected as a virtual machine "guest" residing on a virtual machine host system. This is also known as "Physical-to-Virtual" or 'P2V' transformation.
- **Disaster Recovery:** Virtual machines can be used as "hot standby" environments for physical production servers. This changes the classical "backup-and-restore" philosophy, by providing backup images that can "boot" into live virtual machines, capable of taking over workload for a production server experiencing an outage.
- **Testing and Training:** Virtualization can give root access to a virtual machine. This can be very useful such as in kernel development and operating system courses.
- **Portable Applications:** Portable applications are needed when running an application from a removable drive, without installing it on the system's main disk drive. Virtualization can be used to encapsulate the application with a redirection layer that stores temporary files, windows registry entries and other state information in the application's installation directory and not within the system's permanent file system.
- **Portable Workspaces:** Recent technologies have used virtualization to create portable workspaces on devices like iPods and USB memory sticks.

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

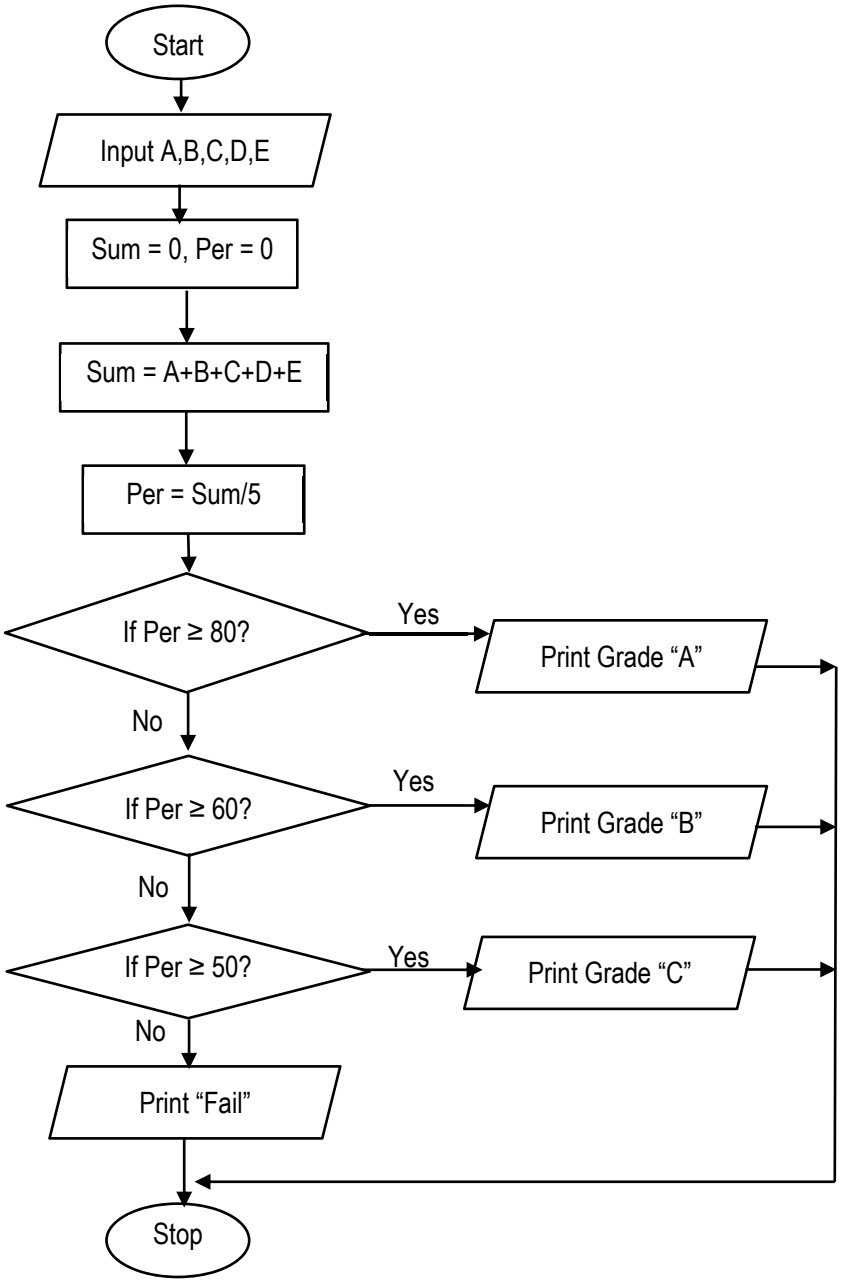
Risk	Key Controls
Credit Line setup is unauthorized and not in line with the banks policy.	The credit committee checks that the Financial Ratios, the Net-worth, the Risk factors and its corresponding mitigating factors, the Credit Line offered and the Credit amount etc. is in line with Credit Risk Policy 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.

(b) The characteristics of Hybrid Cloud are as follows:

- **Scalable:** The hybrid cloud has the property of public cloud with a private cloud environment and as the public cloud is scalable; the hybrid cloud with the help of its public counterpart is also scalable.

- **Partially Secure:** The private cloud is considered as secured and public cloud has high risk of security breach. The hybrid cloud thus cannot be fully termed as secure but as partially secure.
- **Stringent SLAs:** Overall the SLAs are more stringent than the private cloud and might be as per the public cloud service providers.
- **Complex Cloud Management:** Cloud management is complex as it involves more than one type of deployment models and the number of users is high.

5. (a) The required flowchart is as below:



A,B,C,D,E: Denote the five subjects

Sum: Sum of marks of all the subjects

Per: Percentage

(b) The IS auditor needs to determine what events are recorded in access logs. The IS auditor needs to understand the capabilities of the system being audited and determine if the right events are being logged, or if logging is suppressed on events that should be logged.

- **Centralized access logs:** The IS auditor should determine if the organization's access logs are aggregated or if they are stored on individual systems.
- **Access log protection:** The auditor needs to determine if access logs can be altered, destroyed, or attacked to cause the system to stop logging events. For especially high-value and high-sensitivity environments, the IS auditor needs to determine if logs should be written to digital media that is unalterable, such as optical WORM (write once read many) media.
- **Access log review:** The IS auditor needs to determine if there are policies, processes, or procedures regarding access log review. The auditor should determine if access log reviews take place, who performs them, how issues requiring attention are identified, and what actions are taken when necessary.
- **Access log retention:** The IS auditor should determine how long access logs are retained by the organization and if they are back up.

SECTION – B: STRATEGIC MANAGEMENT

SUGGESTED ANSWERS/HINTS

1.

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
d	c	b	c	a	d	c	d	d	d
(xi)	(xii)	(xiii)	(xiv)	(xv)					
c	d	c	c	a					

2. A core competence is a unique strength of an organization which may not be shared by others. Core competencies are those capabilities that are critical to a business achieving competitive advantage. In order to qualify as a core competence, the competency should differentiate the business from any other similar businesses. A core competency for a firm is whatever it does is highly beneficial to the organisation. 'Speed' is the leader on account of its ability to keep costs low. The cost advantage that 'Value for Money' has created for itself has allowed the retailer to price goods lower than competitors. The core competency in this case is derived from the company's ability to generate large sales volume, allowing the company to remain profitable with low profit margin.

3. **(a)** The primary tasks of the strategic manager is conceptualizing, designing and executing company strategies.

For this purpose, his tasks will include:

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

(b) Shree can opt for turnaround strategy which is a highly-targeted effort to return the company to profitability and increase positive cash flows to a sufficient level. Organizations those have faced a significant crisis that has negatively affected operations require turnaround strategy. Once turnaround is successful the organization may turn to focus on growth.

Conditions for turnaround strategies

When firms are losing their grips over market, profits due to several internal and external factors, and if they have to survive under the competitive environment they have to identify danger signals as early as possible and undertake rectification steps immediately. These conditions may be, inter alia cash flow problems, lower profit margins, high employee turnover and decline in market share, capacity underutilization, low morale of employees, recessionary conditions, mismanagement, raw material supply problems and so on.

Action plan for turnaround strategy

- Stage One – Assessment of current problems
- Stage Two – Analyze the situation and develop a strategic plan
- Stage Three – Implementing an emergency action plan
- Stage Four – Restructuring the business
- Stage Five – Returning to normal

4. **(a)** Decision making is a managerial process of selecting the best course of action out of several alternative courses for the purpose of accomplishment of the organizational goals. Decisions may be operational, i.e., which relate to general day-to-day operations. They may also be strategic in nature.

A owner manager at the top level should concentrate on strategic decisions. These are higher level decisions having organisation wide implications. The major dimensions of strategic decisions are as follows:

- Strategic decisions require top-management involvement as they involve thinking in totality of the organization.
- Strategic decisions involve significant commitment of organisational resources.
- Strategic decisions necessitate consideration of factors in the firm's external environment.
- Strategic decisions are likely to have a significant impact on the long-term prosperity of the firm.
- Strategic decisions are future oriented.
- Strategic decisions usually have major multifunctional or multi-business consequences.

(b) The Ansoff's product market growth matrix (proposed by Igor Ansoff) is a useful tool that helps businesses decide their product and market growth strategy. With the use of this matrix a business can get a fair idea about how its growth depends upon it markets in new or existing products in both new and existing markets.

Companies should always be looking to the future. Businesses that use the Ansoff matrix can determine the best strategy. The matrix can help them to decide how to do this by demonstrating their options clearly, breaking them down into four strategies, viz., *Market Penetration, Market Development, Product Development, Diversification*. Determining which of these is best for their business will depend on a number of variables including available resources, infrastructure, market position, location and budget.

5. **(a)** According to Porter, strategies allow organizations to gain competitive advantage from three different bases: cost leadership, differentiation, and focus. Porter called these base generic strategies.

Gennex has opted differentiation strategy. Its products are designed and produced to give the customer value and quality. They are unique and serve specific customer needs that are not met by other companies in the industry. Highly differentiated and unique hardware and software enables Gennex to charge premium prices for its products hence making higher profits and maintain its competitive position in the market.

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.

(b) Rohit Bhargava needs to break higher level strategies into functional strategies for implementation. These functional strategies, in form of Marketing, Finance, Human Resource, Production, Research and Development help in achieving the organisational objective. The reasons why functional strategies are needed can be enumerated as follows:

- Functional strategies lay down clearly what is to be done at the functional level. They provide a sense of direction to the functional staff.
- They are aimed at facilitating the implementation of corporate strategies and the business strategies formulation at the business level.
- They act as basis for controlling activities in the different functional areas of business.

- They help in bringing harmony and coordination as they are formulated to achieve major strategies.

Similar situations occurring in different functional areas are handled in a consistent manner by the functional managers.

6. (a) Multidivisional (M-form) structure is composed of operating divisions where each division represents a separate business to which the top corporate officer delegates responsibility for day-to-day operations and business unit strategy to division managers. By such delegation, the corporate office is responsible for formulating and implementing overall corporate strategy and manages divisions through strategic and financial controls.

Multidivisional or M-form structure was developed in the 1920s, in response to coordination- and control-related problems in large firms. Functional departments often had difficulty dealing with distinct product lines and markets, especially in coordinating conflicting priorities among the products.

Costs were not allocated to individual products, so it was not possible to assess an individual product's profit contribution. Loss of control meant that optimal allocation of firm resources between products was difficult (if not impossible). Top managers became over-involved in solving short-run problems (such as coordination, communications, conflict resolution) and neglected long-term strategic issues. Multidivisional structure calls for:

- Creating separate divisions, each representing a distinct business
- Each division would house its functional hierarchy;
- Division managers would be given responsibility for managing day-to-day operations;
- A small corporate office that would determine the long-term strategic direction of the firm and exercise overall financial control over the semi-autonomous divisions.

(b) Strategy implementation is missing in HQ. It is concerned with the managerial exercise of putting a chosen strategy into action. It deals with the managerial exercise of supervising the ongoing pursuit of strategy, making it work, improving the competence with which it is executed and showing measurable progress in achieving the targeted results.

Strategic implementation is concerned with translating a strategic decision into action, which presupposes that the decision itself (i.e., the strategic choice) was made with some thought being given to feasibility and acceptability. The allocation of resources to new courses of action will need to be undertaken, and there may be a need for adapting the organization's structure to handle new activities as well as training personnel and devising appropriate systems.

It is crucial to realize the difference between the formulation and implementation because they both require very different skills. Also, a company will be successful only when the strategy formulation is sound and implementation is excellent.