MOCK TEST PAPER - II

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.   **(a)**   (i) – III, (ii) - I, (iii) – II

2.   **(c)**   (i), (iii)

3.   **(d)**   System Control Audit Review File (SCARF)

4.   **(b)**   Hardware Virtualization

5.   **(b)**   (i) – IV, (ii) – I, (iii) – III, (iv) – II

6.   **(d)**   Section 43A

7.   **(a)**   Reduced lead time and reduced cycle time

8.   **(a)**   Application Layer

9.   **(c)**   Web server

10. **(b)**   Boundary Control

PART II: DESCRIPTIVE QUESTIONS

1.   **(a)**   The controls associated with the Application Control Framework of Information System are as follows:

   * Boundary Controls

   * Input Controls

   * Processing Controls

   * Database Controls

   * Communication Controls

   * Output Controls

   (b)   The **Database Server** of the Bank contains the entire data of the Bank. The data would consist of various accounts of the customers and master data. The examples of master data are customer data, employee data, base rates for advances, FD rates, the rate for loans, penalty to be levied under different circumstances, etc. Application software would access the database server.

2.   **(a)**   Data Analytics is the process of examining data sets to draw conclusions about the information they contain, increasingly with the aid of specialized systems and software.

Or

Data Analytics predominantly refers to an assortment of applications, from basic Business Intelligence (BI), reporting and Online Analytical Processing (OLAP) to various forms of advanced analytics.

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Some Application areas of Data Analytics are as follows:

- Data Analytics initiatives support a wide variety of business uses. For example, banks and credit card companies analyse withdrawal and spending patterns to prevent fraud and identity theft.

- E-commerce companies and marketing services providers do clickstream analysis to identify website visitors who are more likely to buy a product or service based on navigation and page-viewing patterns.

- Mobile network operators examine customer data to forecast so they can take steps to prevent defections to business rivals; to boost customer relationship management efforts. Other companies also engage in CRM analytics to segment customers for marketing campaigns and equip call centre workers with up-to-date information about callers.

- Healthcare organizations mine patient data to evaluate the effectiveness of treatments for cancer and other diseases.

(b) Various benefits that seller gets from e- business are as follows:

- **Increased Customer Base:** Since the number of people getting online is increasing which are creating not only new customers but also retaining the old ones. E-commerce enables a business to offer its products and services to almost everyone in the world who has an internet-enabled device. It facilitates to reach narrow market segments that are widely scattered geographically.

- **Recurring payments made easy:** Each business has number of operations that are homogeneous in nature. This brings in uniformity of scaled operations.

- **Instant Transaction:** The interaction with the system takes place on real time and therefore, allows the customers to respond quickly. This has made possible to crack number of deals.

- **Provides a dynamic market:** Since there are several players, a dynamic market is provided which enhances quality and business.

- **Reduction in:**
  o costs to buyers from increased competition in procurement as more suppliers can compete in an electronically open marketplace.
  o costs to suppliers by electronically accessing on-line databases of bid opportunities, on-line abilities to submit bids, and on-line review of rewards.
  o overhead costs through uniformity, automation, and large-scale integration of management processes.
  o advertising costs.

- **Efficiency improvement due to:**
  o reduction in time to complete business transactions, particularly from delivery to payment.
  o reduction in errors, time, for information processing by eliminating requirements for re-entering data.

- o reduction in inventories and reduction of risk of obsolete inventories as the demand for goods and services is electronically linked through just-in-time inventory and integrated manufacturing techniques.

- **Creation of new markets:** This is done through the ability to reach potential customers easily and with low cost.

- **Easier entry into new markets:** This is especially into geographically remote markets for enterprises regardless of size and location.

- **Low barriers to entry:** Home page gives equal footing to small organizations with large international firms. Small and large organizations have like opportunity to be on WWW and conduct business on the internet.

- **Better quality of goods:** Standardized specifications and competition have increased and improved variety of goods through expanded markets and the ability to produce customized goods.

- **Elimination of Time Delays:** Faster time to market as business processes are linked, thus enabling seamless processing and eliminating time delays.

3. **(a)** The activities executed by an Operating System (OS) are as follows.

- **Performing hardware functions:** Operating System acts as an intermediary between the application program and the hardware by obtaining input from keyboards, retrieve data from disk and display output on monitors.

- **User Interfaces:** Nowadays, Operating Systems are Graphic User Interface (GUI) based which uses icons and menus like in the case of Windows. GUI objects include icons, cursors, and buttons that change color, size, or visibility when the user interacts with them. A GUI displays objects that convey information and represent actions that can be taken by the user.

- **Hardware Independence:** Every computer could have different specifications and configurations of hardware. Operating System provides Application Program Interfaces (API), which can be used by application developers to create application software independent of the hardware configuration of their system, thus obviating the need to understand the inner workings of OS and hardware. Thus, OS provides hardware independence.

- **Memory Management:** Operating System allows controlling how memory is accessed and maximizes available memory and storage. Operating System also provides Virtual Memory by carving an area of hard disk to supplement the functional memory capacity of RAM. Virtual Memory is an imaginary memory area supported by some operating systems (for example, Windows) that combines computer's RAM with temporary space on the hard disk. If a computer lacks in required size of RAM needed to run a program or operation, Windows uses virtual memory to move data from RAM to a space called a paging file. Moving data to and from the paging file frees up RAM to complete its work. Thus, Virtual memory is an allocation of hard disk space to help RAM.

- **Task Management:** This facilitates user to do Multitasking i.e. to work with more than one application at a time and Time sharing i.e. allowing more than one user to use the system. For example - playing MP4 music, surfing internet through Google Chrome and working in MS Word Document simultaneously is a perfect example of Multitasking. Time-sharing is a technique which enables many users through various terminals to use particular

computer system at the same time. In this, the processor's time is shared among multiple users simultaneously.

- **Networking Capability:** Operating systems can provide systems with features and capabilities to help connect different computer networks. Like Linux & Windows 10 give us an excellent capability to connect to internet.

- **Logical Access Security:** Operating systems provide logical security by establishing a procedure for identification and authentication using a User ID and Password. It can log the user access thereby providing security control.

- **File management:** The operating system keeps a track of where each file is stored and who can access it, based on which it provides the file retrieval.

(b) The sub-processes involved in the Quality management module of Enterprise Resource Planning (ERP) are as follows:

- **Quality Planning:** Quality planning is the process of planning the production activities to achieve the goals of meeting the customer requirements in time, within the available resources.

- **Quality Control:** It is a system for ensuring the maintenance of proper standards in manufactured goods, especially by periodic random inspection of the product. IT involves the checking and monitoring of the process and products with an intention of preventing non-conforming materials from going to the customer. Various result areas are identified for each process and studies are conducted to verify whether those results are being achieved.

- **Quality Assurance:** Quality assurance concentrates on identifying various processes, their interactions and sequence, defining the objectives of each process, identifying the key result areas and measures to measure the results, establishing the procedures for getting the required results, documenting the procedures to enable everyone to follow the same, educating the people to implement the procedures, preparing standard operating instructions to guide the people on work spot, monitoring and measuring the performance, taking suitable actions on deviations and continuously improving the systems.

- **Quality Improvement:** Quality improvement is a never-ending process. The customer's needs and expectations are continuously changing depending on the changes in technology, economy, political situation, ambitions and dreams, competition, etc.

4. (a) **Community Cloud** can be the most suitable choice of cloud under cloud computing in this case. The characteristics of community cloud are as follows:

- **Collaborative and Distributive Maintenance:** In this, no single company has full control over the whole cloud. This is usually distributive and hence better cooperation provides better results.

- **Partially Secure:** This refers to the property of the community cloud where few organizations share the cloud, so there is a possibility that the data can be leaked from one organization to another, though it is safe from the external world.

- **Cost Effective:** As the complete cloud if being shared by several organizations or community, not only the responsibility gets shared; the community cloud becomes cost effective too.

The advantages of community cloud are as follows:

- It allows establishing a low-cost private cloud.

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- It allows collaborative work on the cloud.

- It allows sharing of responsibilities among the organizations.

- It has better security than the public cloud.

(b) The output of the flowchart is X = 39, Y = 16, Z = 28, S = 39.

5. (a) The stages of Money Laundering is as follows:

- **Placement:** The first stage involves the Placement of proceeds derived from illegal activities - the movement of proceeds, frequently currency, from the scene of the crime to a place, or into a form, less suspicious and more convenient for the criminal. In this stage the illegal funds or assets are first brought into the financial system.

- **Layering:** It involves the separation of proceeds from illegal source using complex transactions designed to obscure the audit trail and hide the proceeds. The criminals frequently use shell corporations, offshore banks or countries with loose regulation and secrecy laws for this purpose. Layering involves sending the money through various financial transactions to change its form and make it difficult to follow. Layering may consist of several bank-to-bank transfers or wire transfers between different accounts in different names in different countries, making deposits and withdrawals to continually vary the amount of money in the accounts, changing the money's currency, purchasing high-value items (boats, houses cars, diamonds) to change the form of money. This step is quite complex as it involves making the 'dirty' money as hard to trace as possible.

- **Integration:** It involves conversion of illegal proceeds into apparently legitimate business earnings through normal financial or commercial operations. Integration creates the illusion of a legitimate source for criminally derived funds and involves techniques as numerous and creative as those used by legitimate businesses. For example, false invoices for goods exported, domestic loan against a foreign deposit, purchasing of property and commingling of money in bank accounts.

(b) Section 67B: Punishment for publishing or transmitting of material depicting children in sexually explicit act, etc. in electronic form

Whoever, -

(a) publishes or transmits or causes to be published or transmitted material in any electronic form which depicts children engaged in sexually explicit act or conduct; or

(b) creates text or digital images, collects, seeks, browses, downloads, advertises, promotes, exchanges or distributes material in any electronic form depicting children in obscene or indecent or sexually explicit manner; or

(c) cultivates, entices or induces children to online relationship with one or more children for and on sexually explicit act or in a manner that may offend a reasonable adult on the computer resource; or

(d) facilitates abusing children online; or

(e) records in any electronic form own abuse or that of others pertaining to sexually explicit act with children, shall be punished on first conviction with imprisonment of either description for a term which may extend to five years and with a fine which may extend to ten lakh rupees and in the event of second or subsequent conviction with imprisonment of either description for a term which may extend to seven years and also with fine which may extend to ten lakh rupees:

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PROVIDED that provisions of Section 67, Section 67A and this section does not extend to any book, pamphlet, paper, writing, drawing, painting representation or figure in electronic form -

(i) the publication of which is proved to be justified as being for the public good on the ground that such book, pamphlet, paper writing, drawing, painting, representation or figure is in the interest of science, literature, art or learning or other objects of general concern; or

(ii) which is kept or used for bona fide heritage or religious purposes.

OR

- **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 perquisites 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.

1. (A)

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

(B) (c)

(C) (a)

(D) (c)

(E) (a)

(F) (b)

(G) (d)

2. **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.

3.   (a) 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 its markets in new or existing products in both new and existing markets.

The Ansoff's product market growth matrix is as follows:

Ansoff's Product Market Growth Matrix

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Sky chemical industry can adopt market penetration, product development, market development or diversification simultaneously for its different products.

Market penetration refers to a growth strategy where the business focuses on selling existing products into existing markets. It is achieved by making more sales to present customers without changing products in any major way.

Market development refers to a growth strategy where the business seeks to sell its existing products into new markets. It is a strategy for company growth by identifying and developing new markets for the existing products of the company.

Product development refers to a growth strategy where business aims to introduce new products into existing markets. It is a strategy for company growth by offering modified or new products to current markets.

Diversification refers to a growth strategy where a business markets new products in new markets. It is a strategy by starting up or acquiring businesses outside the company's current products and markets.

As market conditions change overtime, a company may shift product-market growth strategies. For example, when its present market is fully saturated a company may have no choice other than to pursue new market.

(b) Changing problem cultures is very difficult because of deeply held values and habits. It takes concerted management action over a period of time to replace an unhealthy culture with a healthy culture or to root out certain unwanted cultural obstacles and instil ones that are more strategy-supportive.

♦ The first step is to diagnose which facets of the present culture are strategy supportive and which are not.

♦ Then, managers have to talk openly and forthrightly to all concerned about those aspects of the culture that have to be changed.

♦ The talk has to be followed swiftly by visible, aggressive actions to modify the culture-actions that everyone will understand are intended to establish a new culture more in tune with the strategy.

The menu of culture-changing actions includes revising policies and procedures, altering incentive compensation, recruiting and hiring new managers and employees, replacing key executives, communication on need and benefit to employees and so on.

4. (a) Yes, there is always need of guidelines which help in taking correct and appropriate decision to acquire internal and external R&D expertise.

The following guidelines can be used to help in making this decision:

• **If the rate of technical progress is slow**, **the rate of market growth is moderate**, and there are significant barriers to possible new entrants, then in-house R&D is the preferred solution. The reason is that R&D, if successful, will result in a temporary product or process monopoly that the company can exploit.

• **If technology is changing rapidly and the market is growing slowly**, then a major effort in R&D may be very risky, because it may lead to the development of an ultimately obsolete technology or one for which there is no market.

• **If the technology is changing slowly but the market is growing quickly**, there generally is not enough time for in-house development. The prescribed approach is to obtain R&D expertise on an exclusive or nonexclusive basis from an outside firm.

• **If both technical progress and market growth are fast**, R&D expertise should be obtained through acquisition of a well-established firm in the industry.

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(b) Strategic Human Resource Management may be defined as **the linking of human resource management with strategic goals and objectives** to improve business performance and develop organizational culture that fosters innovation and flexibility. The success of an organization depends on its human resources. This means how they are acquired, developed, motivated and retained in the organization – plays an important role in organizational success. This presupposes an integrated approach towards human resource functions and overall business functions of an organization.

The key Human Resource Management practices on which strategic focus should be given to achieve competitive advantage are:

- Pre-selection practices including human resource planning and job analysis.

- Selection practices meant to staff various positions in the organization. Both recruitment and selection policies and procedures should be designed keeping in view the mission and the purpose of the organization.

- Post-selection practices to maintain and improve the workers job performance levels. Human Resources decisions related to training and development, performance appraisal, compensation and motivation should be based on corporate strategy of the organization.

5. (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) According to Porter, strategies allow organizations to gain competitive advantage from three different bases: cost leadership, differentiation, and focus. These bases form different generic strategies as follows:

- **Cost leadership** emphasizes producing standardized products at a very low per-unit cost for consumers who are price-sensitive. It frequently results from productivity increases and aggressive pursuit of cost reduction throughout the development, production, marketing, and distribution processes. It allows a firm to earn higher profits than its competitors.

- **Differentiation** is a strategy aimed at producing products and services considered unique industry wide and directed at consumers who are relatively price-insensitive. It concerns with distinguishing a product/service from that of its competitors through unique design features, technological leadership, unique uses of products and attributes like quality, environmental impact and customer service.

- **Focus** means producing products and services that fulfill the specific needs of small groups of consumers. It involves selecting or focusing a market or customer segment in which to operate.

6. (a) The presence of strategic management cannot counter all hindrances and always achieve success. There are limitations attached to strategic management. These can be explained in the following lines:

♦ 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. Expert strategic planners need to be engaged, efforts are made for analysis of external and internal environments devise strategies and properly implement. These can be really costly for organisations with limited resources.

♦ In a competitive scenario, where all organisations are trying to move strategically, it is difficult to clearly estimate the competitive responses to a firm's strategies.

(b) Diversification strategy involves expansion into new businesses that are outside the current business and markets of an organisation. Based on the nature and extent of their relationship to existing businesses, diversification can be classified into four broad categories:

(i)   Vertically integrated diversification

(ii) Horizontally integrated diversification

(iii) Concentric diversification

(iv) Conglomerate diversification

Concentric diversification takes place when the products are related. The new product is a spin-off from the existing facilities and products/processes. This means that in concentric diversification too, there are benefits of synergy with the current operations. However, concentric diversification differs from vertically integrated diversification in the nature of the linkage the new product has with the existing ones.

In vertically integrated 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. Sequence moves forward or backward in the chain and enters specific product/process steps with the intention of making them into new businesses for the firm. The new product falls within the firm's current process-product chain. In concentric diversification, there is a departure from this vertical linkage, a new related product is added to the existing business. The new product is only connected in a loop-like manner at one or more points in the firm's existing process/technology/product chain.