



FINAL TERM

Submitted By:

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BS (SE)

Subject :

Information system and data processing

Question1 : What are systems? Explain in detail. Take a daily life example of system (any organization or company) and explain its component one by one in detail.

ANS: A system is a group of elements that are integrated with the common purpose of achieving an objective. Organization having common goal for the achievement are functionally interactive units. All systems have inputs, outputs, and feedback, and maintain a basic level of equilibrium. For example, in the human body the heart functions to support the circulatory system, which is vital to the survival of the entire body.

Example

Purchase System

A simple example can be given of a purchase and sales system. In a typical purchase system information related to purchase of materials is kept, for instance,

- Orders for the purchase of various materials.
- Status of deliveries received against specific orders.
- Changes in the order quantity, time, day or other information.
- Quality inspection reports and whether they need to be communicated to the supplier.
- Updated status report of stock.
- Issues made out of the stock.

Daily life example:

The modern world has numerous kinds of **systems** that influence daily life. **Some examples** include public transport **systems**; solar **systems**;

Components of a system

Every system comprises of basic components which in a coordination formulate a system. These are as follows.

• Input elements

The information entered into a system. For instance raw data input to the computer system.

• Process

Any specific treatment defined in the system to be performed on the data entered into the system, for instance, computation, analysis, application of any model.

• Output elements

The results given by the system after the process has been performed on the data being input to the system.

- **Control mechanism**

Every system is expected to generate some sort of standardized output. Hence actual output needs to be compared with what it is supposed to generate. This comparison of actual with expected output is done with the help of control mechanism.

- **Feedback system**

Once the control mechanism has been devised, it needs to a reporting mechanism, which should respond with a corrective action, if required.

- **Objectives**

We just mentioned that a control mechanism should compare actual output with expected/Ideal output. But before this is being done, there needs to be a list of specific objectives which define expected output.

Question2 : What is Management information system? Take an example of MIS of any organization and elaborate in your own words.

ANS: A management information system (MIS) is a computer system consisting of hardware and software that serves as the backbone of an organization's operations. An MIS gathers data from multiple online systems, analyzes the information, and reports data to aid in management decision-making. An MIS is a system designed to manage information within a company or organization. This includes employees, departments, projects, clients, finances, and other types of data. At its most general level, an MIS may include non-computer based elements, such as the structural hierarchy of an organization. However, in the computing world, an MIS typically refers to the hardware and software used to manage information.

Examples: MIS software include Microsoft Dynamics, Fleetmatics WORK, Clarity Professional MIS, and Thar-stern Limited. MIS programs designed specifically for the graphics and print industry include Av-anti Slingshot. Some common functions of MIS software include employee record keeping, invoicing, inventory management, project planning, customer relationship management, and business analysis.

Question3 : Explain Marketing Information system and its types in detail.

Note: You should make your answer understandable by taking a proper example.

ANS: The **Marketing Information System** refers to the systematic collection, analysis, interpretation, storage and dissemination of the market information, from both the internal and external sources, to the marketers on a regular, continuous basis.

The marketing information system distributes the relevant information to the marketers who can make the efficient decisions related to the marketing operations viz. Pricing, packaging, new product development, distribution, media, promotion, etc.

Every marketing operation works in unison with the conditions prevailing both inside and outside the organization, and, therefore, there are several sources (viz. Internal, Marketing Intelligence, Marketing Research) through which the relevant information about the market can be obtained

Internal Records: The Company can collect information through its internal records comprising of sales data, customer database, product database, financial data, operations data, etc.

TYPES:

1:Marketing Intelligence System: The marketing intelligence system provides the data about the happenings in the market, i.e. data related to the marketing environment which is external to the organization. It includes the information about the changing market trends, competitor's pricing strategy, change in the customer's tastes and preferences, new products launched in the market, promotion strategy of the competitor, etc.

2:Marketing Research: The Marketing Research is the systematic collection, organization, analysis and interpretation of the primary or the secondary data to find out the solutions to the marketing problems. Several Companies conduct marketing research to analyze the marketing environment comprising of changes in the customer's tastes and preferences, competitor's strategies, the scope of new product launch, etc. by applying several statistical tools. In order to conduct the market research, the data is to be collected that can be either primary data (the first-hand data) or the secondary data (second-hand data, available in books, magazines, research reports, journals, etc.)

3:Marketing Decision Support System: It includes several software programs that can be used by the marketers to analyze the data, collected so far, to take better marketing decisions. With the use of computers, the marketing managers can save the huge data in a tabular form and can apply statistical programs to analyze the data and make the decisions in line with the findings.

4:Internal data-based marketing information system:

Internal data includes information related to current customers and prospective customers of an organization that is part of its internal operating system.

Example 1: Different airlines like **Jet Airways, Spice Jet, Indigo**, etc. use competitive intelligence to remain in a competitive market. These companies keep on changing prices of flight tickets as per the external information of prices of other airline competitors. Once any competitor increases airfare for a specific route or destination then other flight companies may get benefit by flowing suit to gain higher margins.

Question4 : Why Decision Making is an important factor to run an organization. Explain your answer with the help of a proper example.

ANS: A decision-maker is one of the key factors affecting operations management and development of the whole company and it determines whether the leadership will fail or succeed. Also, it directly affects the relationships between leaders and workers. It Helps You With the Big Decisions Often, as a leader within a business, big decisions that could potentially impact the health of organization need to be made. These hard decisions can affect the lives of multiple employees, not to mention your own job security. Nonetheless, a choice needs to be made by organization.

For example, the decisions made by Accountant person and consulting firms for Industry ultimately resulted in a \$90 billion loss for investors, thousands of employees without jobs, and the loss of all employee retirement funds cash. But Shah mehmood, a former Enron employee and now-famous person, uncovered the accounting problems and tried to enact change. Similarly, the decision made by

firms to trade in mortgage-backed securities is having negative consequences for the entire economy in the Pakistan. All parties involved in such outcomes made a decision, and everyone is now living with the consequences of those decisions.

The end