

Q.1 What is Data and Information ?

ANS : Data is a collection of raw facts and figures, while information is data that has been processed into a meaningful context. Data is the raw material that is used to create information. It can be in the form of numbers, text, images, statistics, or facts.

Information is the output of data that has been analyzed and organized in a way that adds context and meaning. It is used to answer questions and make decisions.

Q.2 Define: Process and Knowledge.

Process is a series of actions or steps taken in order to achieve a particular end. It is a systematic series of actions directed to some end.

Knowledge is understanding or familiarity gained through experience or study. It is the capacity to apply ideas, theories, and practices to real-world situations.

Process and knowledge are closely related, as knowledge is required to devise and execute processes. Processes are needed to apply knowledge in order to achieve a desired outcome. In other words, knowledge is the basis of process and process is the application of knowledge.

Q.3 Explain the terms: input and output

Input: Input refers to the data or instructions that a user enters into a computer system. This could include mouse clicks, keystrokes, or voice commands.

Output: Output is the result of the computer's processing of the input. This could be text, sound, visual representations, or other forms of information.

Q.4 List out the various characteristics of valuable information

1. Accurately reflects the current situation
2. Reliable
3. Relevant
4. Timely
5. Easy to access
6. Cost-effective
7. Readily available
8. Comprehensive
9. Actionable
10. Verifiable

Q.5 What are the benefits of Information?

1. Improved Efficiency: Information systems help to automate many processes, which can help to speed up operations, reduce cost, and improve accuracy.
2. Better Decision-Making: Information systems provide data and analysis tools to help decision makers make better decisions.
3. Improved Collaboration: Information systems can help to facilitate collaboration between people and teams, allowing them to more easily share information and work on projects together.
4. Improved Customer Service: Information systems can help to provide better customer service by providing data and tools to help customer service representatives better understand customer needs and respond to inquiries quickly.
5. Improved Security: Information systems can help to protect data and systems from unauthorized access and malicious attacks.

Q.6 What is Data? List out types of data.

Data is information that has been organized into a form that can be processed, analyzed, and manipulated.

Types of data:

1. Numerical data

2. Categorical data
3. Text data
4. Binary data
5. Image data
6. Audio data
7. Video data
8. Structured data
9. Unstructured data

Q.7 Define System and also give its example.

System: A system is a group of interacting or interrelated entities that form a unified whole.

Example: The human body is an example of a system composed of a variety of organs that work together to keep the body functioning properly.

Q.8 Define System in an Organization

System in an organization is a set of components that work together to achieve a common goal. It can be a combination of people, processes, procedures, technologies, and tools that are designed to interact in order to deliver specific results. For example, a customer service system may include customer service representatives, a call center, a customer relationship management system, and a centralized database. It is important to note that a system is not just a collection of parts, but rather a well-designed and managed whole.

Q.9 What is System Boundary?

System boundary is the physical or logical separation between a system and its environment. It is used to define the scope of a system and help identify its inputs, outputs, and processes. It is important to set a system boundary in order to understand the system in its entirety and to identify the interactions between the system and its environment.

Q.10 List out various Business Information System

1. Enterprise Resource Planning (ERP)
2. Customer Relationship Management (CRM)
3. Supply Chain Management (SCM)
4. Business Intelligence (BI)
5. Knowledge Management System (KMS)
6. Document Management System (DMS)
7. Warehouse Management System (WMS)
8. Accounting Software
9. Human Resource Management System (HRMS)
10. Project Management System (PMS)

Q.11 Define Wisdom

Wisdom is the ability to make sound decisions and judgments based on knowledge, experience, and insight. It is the quality of having experience, knowledge, and good judgment. It can also refer to the collection of one's knowledge, experience, and insights.

Q.12 Differentiate between Data and Information.

Data is raw, unprocessed facts and figures. It is the input of information processing.

Information is data that has been organized, structured, and presented in a meaningful way. It is the output of information processing.

Q.13 Differentiate between open and closed system.

An open system is a system which interacts with its environment, exchanging matter and energy with it.

A closed system is one which is isolated from its environment, with no matter or energy exchange.

Q.14 Differentiate between Probabilistic and deterministic system.

Probabilistic System

A probabilistic system is a system that relies on probability theory to determine its output. The output is determined by random chance, and the same input can lead to different outputs depending on the randomness of the system. Examples of probabilistic systems include slot machines, dice, and lottery games.

Deterministic System

A deterministic system is a system whose output is completely determined by its input. The same input will always lead to the same output, regardless of external factors. Examples of deterministic systems include calculators, computers, and physical machines.

Q.15 List out types of System.

1. Single-User Systems
2. Multi-User Systems
3. Real-Time Systems
4. Embedded Systems
5. Distributed Systems
6. Client/Server Systems
7. Web-Based Systems
8. Mobile Systems
9. Hybrid Systems

Q.16 List out principal document associated with information flow.

1. Data Flow Diagram
2. Activity Diagram
3. Flowchart
4. System Flowchart
5. Process Flowchart
6. Entity Relationship Diagram
7. State Transition Diagram
8. Sequence Diagram
9. Structured English
10. Nassi-Schneiderman Diagram

Q.17 What is Product flow and information flow?

Product flow is the physical process of moving goods from the point of origin to the point of consumption. This includes all of the necessary steps, such as production, packaging, shipping, and distribution.

Information flow is the process of gathering and sharing information between different parties. This includes collecting data, sharing data, and using data to make decisions. It is important for businesses to have effective information flow in order to keep their operations running smoothly.

Q.18 Define ERP.

Enterprise Resource Planning (ERP) is an integrated computer-based system used to manage internal and external resources, including tangible assets, financial resources, materials and human resources. Its purpose is to facilitate the flow of information between all business functions inside the boundaries of the organization and manage the connections to outside stakeholders.

Q.19 Define DSS

A decision support system is an organized collection of people, procedures, software, databases, & devices used to support problem specific decision making & problem solving.

Q.20 List the Components of DSS.

Decision support system in terms of four major components:

- 1) The user interface
- 2) The database
- 3) The models and analytical tools
- 4) The DSS architecture and network

Q.21 Give examples of open and close system.

Open system:

1. The internet
2. A solar system
3. An ecosystem

close system:

1. A sealed system
2. A hermetically sealed container
3. A closed circuit television system

Q.22 List out types of report generated through MIS.

1. Summary MIS report
2. Cash flow statement MIS report
3. Profit MIS report
4. Accounting MIS report
5. Trend MIS report
6. Sales MIS report
7. Exception MIS report
8. Inventory MIS report

Q.23 Explain limitation of DSS.

1. User resistance: Many users may not be comfortable with the idea of using a DSS, as they may feel it will replace their jobs or they may not understand how to use the system.
2. Cost: Buying and maintaining a DSS can be expensive.
3. Lack of flexibility: DSS can be limited in flexibility, as they are difficult to modify or customize.
4. Data quality: Poor data quality can limit the accuracy and usefulness of the DSS.
5. Security: DSS can be vulnerable to hackers and other security threats.

Q.24 Explain characteristics of DSS.

1. Decision Support System (DSS) is a computer-based information system that supports decision-making activities.
2. It is interactive and flexible, allowing end users to access and manipulate data as needed.
3. It can provide data from multiple sources and can be used to simulate various scenarios.
4. It is able to present alternatives and the associated costs, benefits, and risks.
5. It can help to identify patterns and trends in data that can be used to inform decision-making.
6. It has the capacity to make predictions and provide recommendations based on data.
7. It has the ability to integrate data from multiple sources, enabling users to make more informed decisions.
8. It is able to support complex decision-making processes and can be used to make decisions at various levels of an organization.

Q.25 Give the benefits of DSS

1. Improved decision-making: DSS allows businesses to collect data from multiple sources and analyze it, which can help managers make more informed decisions.
2. Increased efficiency: By using DSS, businesses can automate certain processes and reduce the amount of time and resources required to complete tasks.
3. Increased accuracy: Using DSS can reduce the chances of errors as it can help to identify patterns and generate more accurate forecasts.
4. Improved customer service: By analyzing customer data, businesses can better understand their needs and provide better services.
5. Enhanced collaboration: DSS can help to improve collaboration among the different departments and stakeholders of an organization.

Q.26 What is ERP? List out its advantages.

ERP stands for Enterprise Resource Planning. It is an integrated platform of business software solutions designed to help businesses manage their core operations, automate processes, and improve efficiency.

Advantages of ERP:

1. Improved Efficiency: ERP software helps to simplify and streamline processes, eliminating manual data entry, duplicate data entry and manual information tracking.
2. Increased Visibility: With ERP, all business data and information can be seen in one, centralized location. This improves visibility into operations, allowing businesses to make better informed decisions.
3. Enhanced Productivity: ERP systems help automate many of the manual tasks associated with running a business, freeing up time and resources for more productive tasks.
4. Reduced Costs: By streamlining processes and eliminating manual tasks, ERP systems can help reduce costs associated with labor, materials, and overhead.
5. Improved Customer Service: ERP systems can be used to provide customers with faster and more accurate service. This helps to improve customer satisfaction and loyalty.

Q.27 Differentiate between open and close system.

Open system: An open system is a system that freely exchanges energy and matter with its surroundings. Examples of open systems include living organisms, oceans, and economic systems.

Closed system: A closed system is a system that does not exchange energy or matter with its surroundings. Examples of closed systems include chemical reactors, isolated human bodies, and sealed containers.

Q.28 What is CBIS?

CBIS stands for Clinical Biomedical Informatics Specialist. It is a professional designation for individuals who specialize in the use of biomedical informatics to provide clinical decision support and data analysis in healthcare organizations. CBIS professionals are responsible for the development, implementation, and management of systems and processes that enable the efficient and effective use of data and information for decision-making in healthcare.

Q.29 What is SCM?

SCM stands for Supply Chain Management. It is the process of managing the flow of goods and services from the origin of production to the point of consumption. It involves the coordination and integration of all activities within a company and includes the management of inventory, transportation, warehousing, and customer service.

Q.30 List out the characteristics of MIS

1. Accurate and timely information: MIS should provide accurate information in a timely manner to help managers make better decisions.
2. Flexibility: MIS should be flexible enough to accommodate changes in business operations as well as changes in technology.
3. Reliability: MIS should be reliable, meaning that the information it provides should be consistent and reliable for decision making.
4. Cost-effectiveness: MIS should be cost-effective, meaning that it should not require a large expenditure for its implementation.
5. Security: MIS should be able to protect the information it holds from unauthorized access.
6. Scalability: MIS should be able to accommodate changes in the size and scope of the business.
7. User-friendly: MIS should be user-friendly, meaning that it should be easy to use and understand.

Q.31 What is sensitivity analysis?

Sensitivity analysis is a technique used to determine how different values of an independent variable will impact a particular dependent variable under a given set of assumptions. It is often used to determine how sensitive an outcome is to a change in one of its underlying variables. In other words, sensitivity analysis is a tool used to identify and measure the impact of changes in the inputs or assumptions of a model on the

e outputs or results.

Q.32 Define what is analysis.

Analysis is the process of breaking down a complex topic or substance into smaller parts to gain a better understanding of it. It generally involves examining and evaluating data or information, and then formulating conclusions based on the findings. Analysis can be used to gain insight into a wide range of topics, such as business operations, investments, markets, financial trends, and consumer behavior.

Q.33 What is goal of seek analysis.

Seek analysis is a type of analysis used to gain insight into a particular area of study. The goal of seek analysis is to understand the underlying issues and patterns in a data set in order to make better informed decisions. Seek analysis can be used to identify trends and correlations, as well as to uncover hidden relationships between variables. It can also be used to identify potential opportunities and risks.

Q.34 Explain architecture of DSS.

Data-Driven Decision Support System (DSS) architecture is based on a complex set of components that work together to enable the decision-making process. Generally, the architecture of a DSS involves data sources, data warehouses, and a user interface.

Data Sources: This component collects data from various sources such as databases, flat files, and external sources such as the internet. The data sources provide the raw information for the DSS.

Data Warehouse: This component stores the data collected from the data sources. The data warehouse is used to store the data in an organized and secure manner. This allows the DSS to access the data quickly and efficiently.

User Interface: This component provides a user-friendly interface for the user to interact with the DSS. The user interface includes features such as dashboards, reports, and visualizations.

Analytics Engine: This component is responsible for analyzing the data stored in the data warehouse. The analytics engine can be used to generate insights from the data and to create predictive models.

Decision Support System: This component is responsible for providing the user with the insights generated by the analytics engine. It presents the user with the insights in a user-friendly way and provides them with recommendations for decisions.

Q.35 Discuss the functions of DSS.

1. Gathering and Storing Data: DSS can help organizations collect and store data from a variety of sources, including online surveys, customer feedback, and transactional records.

2. Analyzing and Modeling Data: DSS can provide tools for analyzing and modeling data to gain insights that can be used to make decisions. These tools can help identify patterns and trends in the data, as well as uncover potential areas of opportunity.

3. Visualizing Data: DSS can help visualize data in order to make it easier to understand and interpret. This can be particularly useful when trying to identify patterns and trends in the data.

4. Collaborating: DSS can help teams collaborate on data-driven decisions by providing a shared platform for discussion and analysis.

5. Decision Support: Finally, DSS can provide decision makers with the information they need to make informed decisions. By providing tools for analyzing and visualizing data, as well as a platform for collaborating, DSS can help ensure that decisions are made with the best available information.

Q.36 List out activities of TPS.

- > Data collection
- > Data edit
- > Data correction
- > Data manipulation
- > Data storage
- > Document production & reports

Q.37 List out objectives of TPS.

- > Transaction Processing methods

--> Transaction processing cycle

Q.38 Define Batch processing system.

Batch processing is a technique used in computing to process large data sets and run high-volume jobs. It is a method of executing a series of tasks on a computer by dividing them into batches, or groups of tasks, and processing each batch separately. This allows for more efficient use of resources, as the system can be used to do multiple tasks at once. Batch processing systems are often used in data processing and business applications, such as accounting and payroll, to reduce the amount of time needed to complete the tasks.