ALL I.S IMP QUESTION'S IS HERE

* SHORT QUESTIONS FOR INFORMATION SYSTEM *

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 n umbers, 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 w hole.

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 t he 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 an d external resources, including tongible 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, dbases, & 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

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Q.28 What is CBIS?

CBIS stands for Clinical Biomedical Informatics Specialist. It is a professional designation for individuals w

ho 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?

ALL I.S IMP QUESTION'S IS HERE

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 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 i s 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 generate d by the analytics engine. It presents the user with the insights in a userfriendly 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 source s, 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 t hat 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 objectiviteis 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. I
t is a method of executing a series of tasks on a computer by dividing them into batches, or groups of task
s, and processing each batch separately. This allows for more efficient use of resources, as the system c
an 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 t he tasks.

* LONG QUESTIONS FOR INFORMATION SYSTEM *

1) Explain characteristics of valuable Information.

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- Accuracy: Information must be accurate, without any errors or distortions. Inaccurate information can lead to bad decision-making.

- Relevance: Information must be relevant to the task at hand. Irrelevant information can be a waste of time and resources.

- Timeliness: Information must be available when needed, in a timely manner. Delayed or outdated information may be useless.

- Completeness: Information must be complete, providing all relevant details required for making an informed decision.

- Consistency: Information must be consistent across all sources and over time. Inconsistent information can lead to confusion and mistrust.

- Accessibility: Information must be easily accessible to authorized users, without any unnecessary restrictions or barriers.

- Security: Information must be protected from unauthorized access, modification, or destruction.

- Reliability: Information must be reliable, with a high degree of trustworthiness, consistency, and predictability.

2) Explain input, process, output and feedback in detail.

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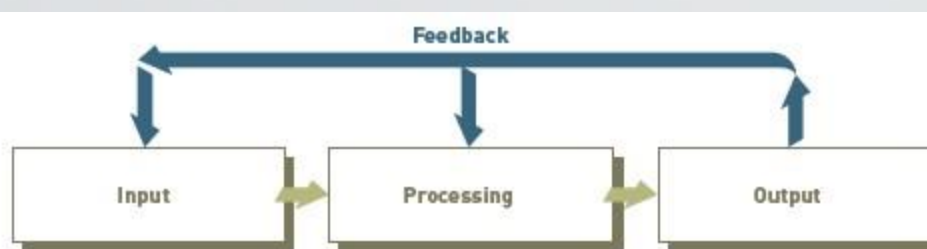
- Input: Input refers to the data and information that is entered into the system. This can be in the form of data that is manually entered by a user or data that is received automatically
  from other systems. The quality of the input affects the quality of the output, and it is important to ensure that input is accurate, complete, and relevant to the task at hand.

- Process: Once the input is received, the system processes it to create meaningful information. The process involves sorting, analyzing, and manipulating the data to generate output. This stage is important to ensure that the information produced is accurate, relevant, and useful.

- Output: The output is the result of the processing of the input. This can take the form of reports, charts, graphs, or any other output format that is relevant to the user's needs. The output should be clear, concise, and presented in a way that is easy to understand.

- Feedback: Feedback is the response from the user or the system that is based on the output. This allows the user to evaluate the output and determine if it meets their needs. Feedback can also be used to improve the input or the process, ensuring that the system operates more efficiently in the future

3) Explain classification of Information.

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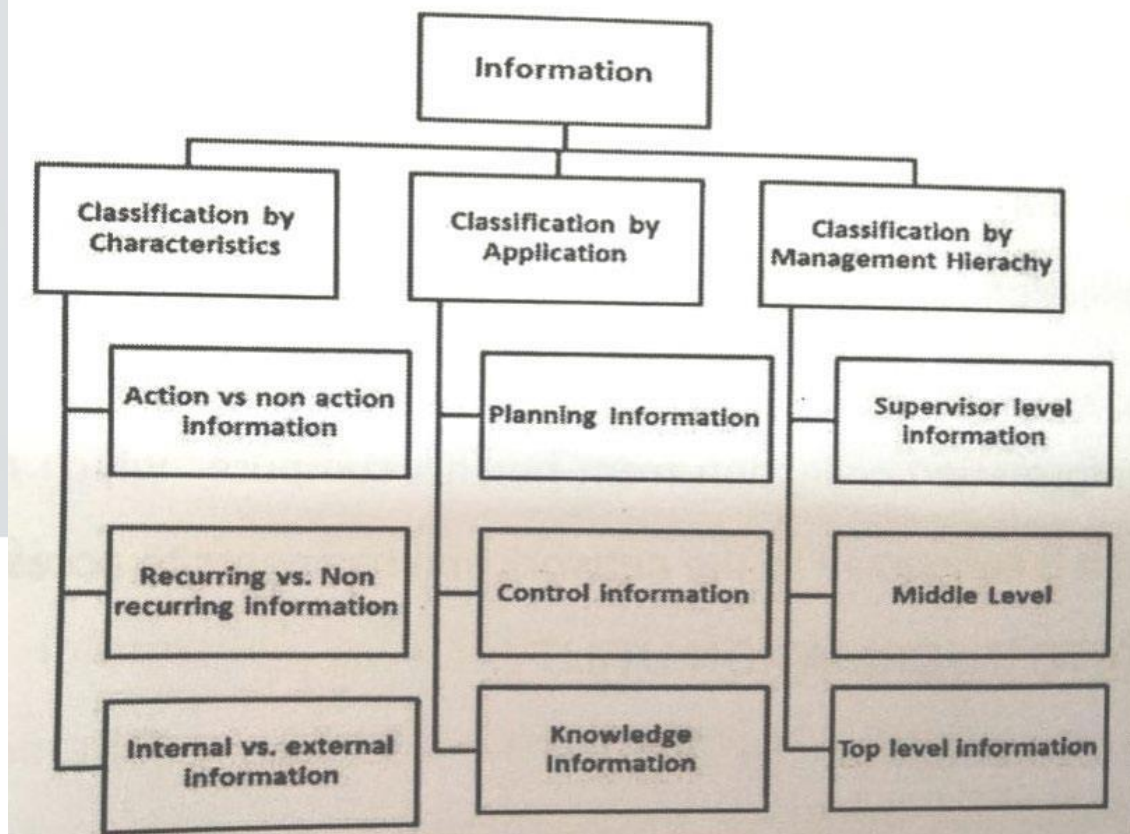
CLASSIFICATION BY APPLICATION

In terms of applications, information can be categorized as:

1. **Planning Information :** This information is needed for creating standard norms, specifications and plans in an organization. This information is used in strategic, tactical, and operation planning of any activity. Examples of such information are time standards, design standards.

2. **Control Information :** This information is needed for establishing control over all business activities through feedback mechanism. When such information reflects a deviation from the established standards, the system should take a decision or an action for control.

3. **Knowledge Information :** Knowledge is defined as " information about information ". Knowledge information is acquired through experience and learning, and collected from data and research studies.

4. **Organizational Information :** Organizational information deals with an organization's environment, culture and its objectives. Everybody in the organization uses this information; examples of such information are employee and payroll information.

5. **Functional Information :** This is operation specific information. For example, daily schedules in a manufacturing plant that refers to the detailed assignment of jobs to machines or machines to operators. This information is mostly internal to the organization.

6. **Database Information :** Database information contains large quantities of information that has multiple usage and application. Such information is stored, retrieved and managed to create databases. For example, material specification or supplier information is stored for multiple users.

CLASSIFICATION BY MANAGEMENT HIERARCHY

- **Top level information :** Top - level managers are responsible for controlling and managing the entire organization. Examples of top - level managers include a company's board of directors, president, vice - president and CEO. Information generated by top - level persons is called top level information.

- **Middle level information :** Middle - level managers are responsible for executing organizational plans, which fulfill the company's policies. These managers act at an intermediary between top - level management and low - level management. Examples of middle - level managers include general managers, branch managers, and department managers. Information generated by middle level persons is called middle level information.

- **Supervisor level information :** Low - level managers focus on controlling and directing. They the employees they supervise. Examples of low - level role models for as managers include supervisors, section leads, and foremen. Information generated by supervisor level persons is called supervisor level information.

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4) Explain information resources.

INFORMATION RESOURCES

o Information resources can be of many type
  1. Textual data
  2. Numerical data
  3. Graphical data
  4. Audio data
  5. Video data & Photographs

Textual data : Textual data consist of books and journals and other useful information is stored in a digital form in computer disk storage . There are 2 ways of storing this information One way is to scan each page with a scanner Scanner digitizes the image storing a white and one for a dark spot in its local memory . This form of storage is called a bit map form The other way of storing a text is to represent each character by its ASCII Code.

Numerical data : Numerical data information is measurable it is always collected in member form . An mathematical creration can be performing on numerical data . You can also put data in ascending (least to greatest) and descending (greatest to least) order . example data of various material data from experiments , astronomical tables , etc.

o Graphical data : Graphics data may be photographs , maps , drawings , etc. The simplest way of storing such is to scan the image and store it as a bit pattern . Example maps of cities , a linked list de road networks .

1. Audio data Audio data are digitized , compressed using a commonly accepted standard compression algorithm and stored .

2. Video data : Video data requires large storage space due to the need for repeating frames . Each frame of a video is digitized using picture element (pixel) . Each pixel needs 3 bytes to code various shades of color and intensity , thus large storage is needed to store video if it is not compressed Compression is thus essential . Common standard for compression have been evolved

3. Photographs : Both color and colorless photographs are stored in bit - mapped form using compression algorithms to reduce storage space .

5) What is information? Explain benefits and need of Information.->

INFORMATION

Information – Processed data is known as information. It is defined as data put into understandable, meaningful, useful and communicated to the recipient who takes decision on it. When information is packaged or used for understanding or doing something, it is known as knowledge

INFORMATION NEEDS :

- Need of information depends upon the managers and decision makers and accordingly it should have certain characteristics which makes the information more valuable to the organization Incorrect or incompatible information may be transformed in to poor decision of information not pertinent to the situation , it is not delivered to decision makers in timely fashion or be complex to understand it may be lime value to the organization.

INFORMATION BENEFITS

- Information is directly linked to how it helps decision makers achieve their organization go An information system is a specialized tape of system and can be defined in a number of different it is a set of interrelated elements or components that collects , manipulate and determinate data & information and provide a feedback mechanism to meet an objective The process of defining relationship among date to create useful information requires Knowledge is the awareness and understanding of a set of information and the ways that information can be made useful to support a specific task or reach a decision.

6)Explain characteristics of a system.

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system can be made up of hardware, software, data, people, and processes, all of which work together to perform a specific function or set of functions.

For example, a computer system consists of hardware components like the CPU, motherboard, RAM, and hard drive, as well as software components like the operating system, application programs, and utilities. These components work together to process data, run applications, and perform various tasks.

CHARACTERISTICS OF SYSTEM

- Every system has a purpose.
- Every system is made up of components like input process output, feedback and control etc.
- System is made up of subsystem, whose goals are referred to as sub goals.
- Goal of a system is more important then subsystem goal.
- Systems whether open or closed have an element of control associated with them.

7) Explain element of system.

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- Inputs: These are the resources or raw materials that are necessary to operate the system, and which are transformed or processed into outputs.

- Processes: These are the methods, rules, or algorithms that are used to transform inputs into outputs. Processes can be manual or automated, and can involve different types of technologies or tools.

- Outputs: These are the products, services, or outcomes that are produced by the system as a result of the processing of inputs.

- Feedback: This refers to the information that is generated by the system and that is used to monitor and adjust its performance. Feedback can be positive (reinforcing) or negative (corrective).

- Control: This refers to the mechanisms or methods used to regulate or manage the performance of the system. Controls can be built into the system or external to it.

- Environment: This refers to the external factors or conditions that affect the operation or performance of the system, such as the physical or social context in which the system operates.

8) Explain deterministic and Probabilistic system.

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- Deterministic and probabilistic are two ways to describe systems in information systems.

- A deterministic system is one where the behavior of the system is completely determined by its initial state and the rules that govern its behavior. This means that given a set of inputs, the output of the system is always the same. Deterministic systems are predictable and can be modeled with mathematical equations. Examples of deterministic systems include a clock, a computer, or a car engine.

- A probabilistic system, on the other hand, is one where the behavior of the system is not completely predictable. The behavior of a probabilistic system is determined by a set of probabilities that describe the likelihood of different outcomes. This means that given the same set of inputs, the output of the system can be different each time it is run. Probabilistic systems are used to model systems where there is a degree of uncertainty, such as in weather forecasting, financial markets, or traffic flow.

- In information systems, both deterministic and probabilistic models are used. Deterministic models are often used to simulate and analyze systems that can be fully described and predicted with mathematical equations. Probabilistic models, on the other hand, are used to analyze systems where the outcomes are not completely predictable and where there is a degree of uncertainty 9) Explain open and closed system.

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- In the field of systems thinking and systems theory, an open system refers to a system that interacts with its environment, while a closed system refers to a system that does not interact with its environment.

- An open system is characterized by the exchange of matter, energy, or information with its environment. In other words, it receives inputs from the outside and processes them to produce outputs that are then released into the environment. Examples of open systems include living organisms, organizations, and ecosystems. These systems have the capacity to adapt and evolve in response to changes in their environment.

- On the other hand, a closed system is characterized by a lack of interaction with the environment. Such a system operates in isolation and does not receive any inputs or outputs from the outside. A perfect example of a closed system is the universe, which is often considered as a self-contained entity that operates according to its own laws and principles.

- In practice, most systems are neither completely open nor completely closed, but rather fall somewhere on a continuum between the two extremes. However, the concepts of open and closed systems are useful in understanding the degree of interaction between a system and its environment and the impact that this interaction can have on the system's behavior and outcomes.

10) Explain types of information system.

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- Transaction processing systems: These systems process routine business transactions, such as sales or payroll.

- Management information systems: These systems provide information to managers in a timely and organized way, such as reports on sales or production.

- Decision support systems: These systems help managers make decisions by providing tools for analyzing data and information.

- Expert systems: These systems use artificial intelligence to provide expert-level advice and assistance in specific areas, such as medical diagnosis or financial analysis.

- Executive information systems: These systems provide top-level executives with information and tools for strategic decision-making.

- Office automation systems: These systems automate routine office tasks, such as scheduling and document management.
- Collaborative systems: These systems allow people to work together, share information, and communicate remotely.

11) Explain CBIS with its components.

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COMPUTER-BASED INFORMATION SYSTEMS

A computer-based information system (CBIS) is a single set of hardware, software, databases, telecommunications, people, and procedures that are configured to collect, manipulate, store, and process data into information. Lloyd's Insurance in London used a CBIS to reduce paper transactions and convert to an electronic insurance system. The CBIS allows Lloyd's to insure people and property more efficiently and effectively.

12) Explain steps to convert manual system into computerized information system. ->

1. Identify the manual system: The first step is to identify the existing manual system and its processes. This involves understanding the flow of information, the tasks performed, and the people involved.

2. Define the scope of the computerized information system: Once the manual system is understood, the next step is to define the scope of the computerized information system. This includes identifying the

functionality required, the data to be stored, and the users who will access the system.

3. Design the computerized information system: Based on the scope of the computerized information system, a design needs to be created. This involves selecting appropriate hardware and software components, as well as creating the database schema and user interface.

4. Develop the computerized information system: The development phase involves building the system, including coding the software and configuring the hardware.

5. Test the computerized information system: Once the system is developed, it needs to be tested to ensure it works as expected. This involves testing the functionality, data input and output, and user experience.

6. Train users: Once the system has been tested, users need to be trained on how to use it effectively.

7. Implement the computerized information system: Finally, the system can be implemented, which involves transitioning from the manual system to the new computerized information system.

13) What is BIS? Explain Principal function system in business.

ALL I.S IMP QUESTION'S IS HERE

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BIS stands for Business Information System. It refers to a set of interrelated components that work together to collect, process, store, and distribute information to support decision-making, coordination, control, analysis, and visualization of activities in a business or organization.

The principal functions of a Business Information System can be described as follows:

1. Data Management: BIS is responsible for managing and organizing data that is relevant to the business. This involves collecting data from various sources, processing and storing it in a structured way, and making it easily accessible to users.

2. Information Processing: BIS helps to process the data collected by transforming it into useful information that can be used to support decision-making, analysis, and forecasting.

3. Communication: BIS provides a means of communication between different parts of the business or organization. It enables the sharing of data and information between employees, departments, and even between different organizations.

4. Decision Making: BIS provides the necessary information to support the decision-making process in a business. This

includes data analysis, forecasting, and visualization tools that help to support strategic and tactical decision making.

5. Control: BIS provides tools and processes to monitor and control business processes. This includes tracking performance, identifying areas of improvement, and implementing controls to mitigate risk.

6. Business Process Automation: BIS provides a means to automate repetitive and time-consuming business processes, reducing the need for manual intervention and improving efficiency.

14) List out various Business Information System. Explain any three System.

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INFORMATION USED IN BUSINESS FOR DECISION - MAKING IS GENERALLY CATEGORIZED INTO THREE TYPES :

1. Strategic Information : Strategic information is concerned with long term policy decisions that defines the objectives of a business and checks how well these objectives are met . For example , acquiring a new plant , a new product , diversification of business etc. , comes under strategic information .

2. Tactical Information : Tactical information is concerned with the information needed for doing control over business resources , like budgeting , quality control , service level inventory level , productivity level etc.

3. Operational Information : Operational information is concerned with business level information and is used for conduction of specific operations of business . Various operator specific , machine specific and shift specific jobs comes under this category.

15) Explain special purpose systems of Business Information Systems.

➜ Customer Relationship Management (CRM) Systems: These systems are designed to help businesses manage their customer relationships, providing tools for tracking customer interactions and automating marketing campaigns.

- Supply Chain Management (SCM) Systems: These systems help businesses manage their supply chain, providing tools for inventory management, procurement, and logistics.

- Enterprise Resource Planning (ERP) Systems: These systems integrate all aspects of a business, including finance, human resources, manufacturing, and customer service, into a single system.

- Business Intelligence (BI) Systems: These systems provide tools for analyzing and interpreting business data, allowing businesses to make better decisions based on real-time data.

- Electronic Data Interchange (EDI) Systems: These systems allow businesses to exchange data

electronically with their suppliers and customers, automating many aspects of the supply chain.

- Financial Management Systems: These systems help businesses manage their finances, providing tools for accounting, budgeting, and financial reporting

16) Explain Product flow.

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Product flow is an important aspect of business operations as it helps organizations to manage their inventory levels, track the movement of goods, and improve the overall efficiency of their supply chain. Information systems can be used to support product flow by providing real-time visibility into inventory levels, automating the tracking of goods, and streamlining the distribution process.

Some of the key features of information systems that support product flow include:

- Inventory management: An information system can be used to manage inventory levels, track the movement of goods, and optimize the storage and distribution of products.

- Order processing: Information systems can be used to process orders, generate invoices, and manage

payments, providing a streamlined process for customers to order products and for organizations to fulfill those orders.

- Logistics management: Information systems can be used to manage transportation, shipping, and other logisticsrelated activities, helping organizations to optimize their supply chain operations and reduce costs.

- Customer service: An information system can be used to track customer orders, respond to customer inquiries, and provide real-time updates on the status of orders, improving the overall customer experience.

17) Explain Information flow in

detail. ->

- Input: In this stage, data and information are collected from various sources and entered into the system. The input stage is critical to the overall performance of the information system, as the quality and accuracy of the data entered will affect the output of the system.

- Processing: In this stage, the collected data and information are processed and transformed into useful information. This involves performing calculations, running algorithms, and manipulating data to produce meaningful results.

- Storage: In this stage, the processed information is stored in a database or other storage media for future use. The storage system must be designed to ensure the security and accessibility of the information.

- Retrieval: In this stage, the stored information is retrieved from the storage system and made available for use by authorized users. The retrieval process must be fast and efficient to meet the needs of the users.

- Output: In this stage, the processed and retrieved information is presented in a meaningful way to the users. This may involve creating reports, graphs, or other visual representations of the information.

19) Explain principal document associated with information flow.

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1. Data Input Forms: These are documents used to capture data at the source. They may be electronic or paper-based and may be used to input data manually or through automated means.

2. Source Documents: These documents contain the original information that is entered into the system. Examples include invoices, purchase orders, and receipts.

3. Data Processing Forms: These documents are used to capture information about the processing of data. They may include log files or other tracking mechanisms that help ensure the accuracy and completeness of the processing.

4. Reports: Reports are documents generated by the system that provide information to users. They may be generated on a regular basis or in response to specific queries.

5. Output Documents: These documents contain the results of data processing. Examples include checks, invoices, and packing slips.

6. Queries: Queries are requests for specific information from the system. They may be initiated by users or by other systems.

7. System Logs: System logs record information about the operation of the system, including errors, warnings, and other events.

8. User Manuals: User manuals provide information about how to use the system. They may include descriptions of the system's functionality, step-by-step instructions, and troubleshooting tips.

20) Define ERP? Explain its advantages and disadvantages in detail.

->ERP stands for Enterprise Resource Planning. It is a type of software system that integrates and manages various business processes and functions, such as accounting, inventory, human resources, manufacturing, customer relationship management (CRM), and supply chain management.

Advantages of ERP:

1. Improved Efficiency: ERP helps to streamline business processes and automate repetitive tasks, reducing the amount of time and effort required to complete them.

2. Better Decision-Making: ERP provides real-time access to accurate and relevant data, which can help businesses make more informed decisions.

3. Enhanced Collaboration: ERP software enables employees to collaborate more easily by sharing information and documents across different departments and locations.

4. Increased Visibility: With a centralized database, ERP provides a complete view of business operations, allowing businesses to identify trends, spot potential problems, and address issues in real-time.

5. Customizable: ERP systems can be customized to meet the specific needs of a business, making it more flexible and adaptable.

Disadvantages of ERP:

1. Cost: ERP systems can be expensive to purchase and implement, especially for small businesses.

2. Time-consuming Implementation: Implementing an ERP system can be a lengthy and time-consuming process, requiring significant resources and staff time.

3. Complexity: ERP systems are complex and require specialized expertise to manage and maintain, which may require additional staff or training.

4. Resistance to Change: Implementing a new ERP system can be a major change for a business, and some employees may resist the changes or have difficulty adjusting to the new system.

5. Data Security: ERP systems can be vulnerable to cyber threats and data breaches, which can be costly and damaging to a business. Therefore, it is important to have proper security measures in place to protect the system and its data.

21) Define ERP. Explain MIS, BIS and DSS.

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- ERR or Enterprise Resource Planning, is a type of software that integrates and manages various business processes, such as finance, manufacturing, sales, and human resources. It is used to streamline operations and improve efficiency by providing a single system for managing different business functions.

- MIS, or Management Information System, is a type of information system that provides information to managers in a timely and organized way. It helps managers make decisions by providing tools for analyzing data and information. BIS, or Business Intelligence System, is a type of system that collects, processes, and presents data and information in a way that helps businesses make informed decisions. It includes tools for data analysis, reporting, and visualization.

- DSS, or Decision Support System, is a type of system that helps managers make decisions by providing tools for analyzing data

and information. It can include software, databases, and other

tools for analyzing and presenting data.

22). Explain characteristics of DSS.

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- A Decision Support System (DSS) is an interactive computer-based
  information system that helps decision-makers in solving complex
  and unstructured problems. DSS combines the decision-making
  abilities of humans with the computational abilities of computers
  to provide solutions to specific problems. The following are the
  characteristics of DSS:

- Interactive: DSS is an interactive system that allows the user to
  interact with the system and input data or commands to solve the
  problem.

- Decision-oriented: DSS is designed to support decision-making by
  providing information, knowledge, and data to the user to make
  better decisions.

- Flexibility: DSS is flexible and adaptable, which means it can be
  customized to meet the specific needs of the user.

- Intelligent: DSS has the ability to learn and make decisions based on past experiences.

- User-friendly: DSS is designed to be user-friendly and easy to use, even for users with limited technical knowledge.

- Integration: DSS is integrated with other systems to access and utilize data from various sources.

- Analytical: DSS is an analytical system that uses mathematical models and statistical analysis to analyze data and provide insights into complex problems.

- Collaborative: DSS is a collaborative system that allows users to work together and share information to solve a problem.

23) Explain components of DSS.

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A Decision Support System (DSS) is a computer-based information system designed to support the decision-making process within an organization. The key components of a DSS include:

1. Data Management System: This component manages the storage and retrieval of data used by the DSS. It may include a database management system, a data warehouse, or other data storage mechanisms.

2. Model Management System: This component includes the various models used by the DSS to analyze and process data. It may include statistical models, optimization models, simulation models, or other types of models.

3. User Interface: This component provides an interface for users to interact with the DSS. It may include graphical user interfaces (GUIs), web-based interfaces, or other types of interfaces.

4. Knowledge-Based System: This component includes a set of rules or heuristics used by the DSS to guide decision-making. It may include expert systems, artificial intelligence, or other types of knowledge-based systems.

5. Communication Network: This component enables communication between different components of the DSS, as well as communication with external systems and data sources.

6. Hardware and Software: The hardware and software components of the DSS include the physical components (e.g., servers, workstations) and the software applications used to support the system

24) What is TPS? Explain transaction processing activities.

T PS (Transaction Processing System) is a type of information system that is designed to process transactions. Transactions are business operations that involve the exchange of goods or services between entities. Examples of transactions include making a purchase at a store, transferring money between bank accounts, and booking a hotel room.

- Transaction processing activities involve the following steps:
- Capture: Transactions are initiated by a user or system and are captured by the TPS. Validation: The T PS checks the validity of the transaction by verifying that the user has the necessary permissions, the required information is present, and the data is accurate.
- Update: If the transaction is valid, the TPS updates the relevant databases or systems to reflect the changes caused by the transaction.

- Output: The T PS generates any necessary output, such as receipts, confirmation messages, or reports.
- Storage: The TPS stores a record of the transaction for future reference and auditing purposes.

25) Explain objectives of TPS.

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- Record Keeping: The TPS captures and stores information about transactions in a database for record-keeping purposes. The information collected by the TPS can be used for various purposes, such as financial reporting, decision making, and auditing.

- Data Processing: The TPS processes data related to various business transactions, such as sales, purchases, and inventory. The data is processed in real-time, which means that it is available immediately for analysis and decision making.

- Efficiency: The TPS is designed to improve the efficiency of business processes by automating routine tasks. By reducing the need for manual data entry and processing, the TPS can help to reduce errors, improve productivity, and reduce costs.

- Accuracy: The TPS is designed to ensure the accuracy of transaction data. By automating data entry and processing, the TPS can reduce errors and ensure that transaction data is complete and accurate.

- Timeliness: The TPS is designed to provide timely information about business transactions. By processing data in real-time, the TPS ensures that decision makers have access to up-to-date information that can be used to make informed decisions.

27) Explain Development process of MIs.

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- Planning and Analysis: This is the initial stage where the organization identifies the need for an MIS system. The organization defines its goals and objectives and

the information required to achieve those objectives. In this stage, it identifies the resources required to develop an MIS system.

- System Analysis and Design: In this stage, the organization analyzes the requirements and designs the MIS system. The organization identifies the data that needs to be collected, processed, and analyzed. It also identifies the software and hardware required to develop the system.

- Development: This is the stage where the actual development of the system takes place. The development team writes the code and integrates the hardware and software components. They also test the system to identify any errors or issues that need to be resolved.

- Implementation: In this stage, the MIS system is deployed and implemented in the organization. The users are trained to use the system effectively. The organization also defines the roles and responsibilities of the users and the administrators.

- Maintenance: Once the system is implemented, it needs to be maintained to ensure that it remains functional and effective. The organization needs to ensure that the system is updated regularly and that any bugs or issues are resolved.

- Evaluation and Review: This is the final stage where the organization evaluates the effectiveness of the MIS system. It reviews the performance of the system and identifies any areas that need improvement. The organization may also conduct user surveys to gather feedback on the system.

28) Explain characteristics of MIS.

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1. Provides Integrated Information: MIS provides integrated information to managers so that they can make effective decisions based on the data.

2. Supports Decision Making: MIS provides a range of information, including both structured and unstructured data, to support decision-making by management.

3. Emphasizes Management Control: MIS emphasizes management control over operational control by providing relevant information to the management, which helps them in planning, controlling and monitoring the overall performance of the organization.

4. Future-Oriented: MIS is future-oriented, meaning that it focuses on long-term planning and decision-making.

5. Facilitates Communication: MIS facilitates communication and collaboration among different departments within the organization by providing real-time data.

6. Provides Timely and Accurate Information: MIS provides timely and accurate information to the management, which helps them make informed decisions.

7. Provides a Competitive Advantage: MIS can provide a competitive advantage to organizations by enabling them to make better decisions, improving their responsiveness to market changes, and optimizing their business processes.

29) Explain Purchase System and Accounting system.

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Purchase System is an information system that automates the purchasing process, making it more efficient, accurate, and cost-effective. It involves the entire procurement process, including requisitioning, ordering, receiving, and paying for goods and services. The system integrates purchasing functions with other business processes, such as inventory management, budgeting, and financial management.

A typical Purchase System consists of several sub-systems, including:

- Requisitioning System: This system captures the purchase requests from various departments in the organization.

- Purchase Order System: This system creates and manages purchase orders for the approved purchase requests.

- Receiving System: This system records the receipt of goods and services and reconciles them against the purchase order.

- Invoice Processing System: This system processes the vendor invoices and prepares payment to the vendors.

->An Accounting System is an information system that records, processes, and reports financial transactions of an organization. The system captures data from various sources, such as purchase system, sales system, payroll system, and general ledger, and organizes them into financial statements, such as balance sheet, income statement, and cash flow statement. The system provides timely and accurate financial information to stakeholders, such as investors, creditors, and management, for decision-making and performance evaluation.

A typical Accounting System consists of several sub-systems, including:

- General Ledger System: This system records all financial transactions of the organization and maintains the account balances.

- Accounts Payable System: This system manages vendor invoices and payments.

- Accounts Receivable System: This system manages customer invoices and collections.

- Cash Management System: This system manages cash inflows and outflows and prepares cash forecasts.

- Financial Reporting System: This system prepares financial statements, such as balance sheet, income statement, and cash flow statement, and other reports for internal and external stakeholders.

30). Explain order processing system.

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The primary goal of an OPS is to ensure that orders are processed accurately and efficiently, resulting in satisfied customers and increased sales. This is achieved through a series of steps, which may vary depending on the specific needs of the business, but typically include the following:

- Order entry: The customer places an order, which is entered into the system either manually or electronically.

- Order verification: The system verifies that the order is complete and accurate, and checks that the necessary inventory is available to fulfill the order.

- Order processing: The system processes the order and generates a confirmation or acknowledgement to the customer.

- Inventory management: The system updates inventory records to reflect the goods or services that have been sold.

- Shipping and delivery: The system generates packing slips, shipping labels, and other documentation necessary for the goods to be delivered to the customer.

- Invoicing and payment processing: The system generates an invoice and processes payment from the customer.

ALL I.S IMP QUESTION'S IS HERE

- Order tracking: The system tracks the progress of the order from entry to fulfillment, providing real-time updates to the customer and the business.