1. What is called structure of MIS? Discuss?

Physical Components of MIS

- 1. **Hardware**: This refers to the physical data processing equipment and peripheral devices, such as CPU, monitor, keyboard, printer, drives, tapes, and communication devices 2.
- 2. **Software**: It encompasses the instructions or programs that direct the operation of the hardware, including system software and application software 2.
- 3. **Database**: The database consists of all data utilized by application software and is stored in files 2.
- 4. **Procedures**: Formal operating procedures, such as manuals, are required to operate a system 2.
- 5. **Operating Personnel**: Employees input data into desktop computers, and various departments add additional operating information through computers. The computers link to routers and central servers via an ethernet network 1.

2. What are the Basic structural concepts?

Second Moment of Area: This is a crucial geometrical property of a plane or area that indicates how its points are distributed in relation to an arbitrary axis. It is essential for construction engineers as it helps in calculating stresses and beam deflection, which are important structural concepts 1.

- 4. **Compatibility of Displacement**: This concept implies that when a structure deforms, connected members remain fitted together without void or hole. It is a powerful concept used in the analysis of indeterminate structures with unknown redundant forces in excess of the three equations of equilibrium 2.
- 5. **Structural Systems**: In building construction, the particular method of assembling and constructing structural elements of a building to support and transmit applied loads safely to the ground without exceeding allowable stresses in the members. Basic types of systems include bearing-wall, post-and-lintel, frame, membrane, and suspension 3.

6. **Structural Engineering Concepts**: Structural engineering theory is based upon applied physical laws and empirical knowledge of the structural performance of different materials and geometries. It uses relatively simple structural concepts to build complex structural systems 4.

3. Write down the differences between public and private information system?

1.

Ownership and Control:

- Public Information System: Owned and controlled by the government, consisting of a chain of health centers and hospitals run by the government 1.
- Private Information System: Not owned or controlled by the government, typically operated by private entities or organizations.

2. Accessibility and Cost:

- Public Information System: Available at a cheaper cost for everyone, but may experience delays due to over-crowding 1.
- Private Information System: Offers better and faster service, but is very expensive and may only be affordable for individuals with higher earnings 1.

3. **Equipment and Technologies**:

- Public Information System: Often lacks proper equipment and modern technologies.
- Private Information System: Well-equipped with modern machines and technologies.

4. Purpose and Accessibility:

- Public Information System: Primarily designed to serve the general public and is accessible to a wide range of users.
- \circ Private Information System: Often designed to share resources among a specific group of users without exposing them to the outside world $\frac{1}{2}$.

4. What is MIS Office automation?

MIS Office Automation:

1. **Definition**: Office automation in the context of Management Information Systems (MIS) refers to the use of computer-based

- systems to collect, process, store, manipulate, and relay office information needed for accomplishing basic tasks 1.
- 2. **Integration of Technology**: It involves the integration of various computer machinery and software tools that help in optimizing or automating existing office procedures 1.
- 3. **Hardware and Software Solutions**: An office automation system consists of both hardware and software solutions, providing access to large data sets, reports, and analytics to enable more informed decisions 2.
- 4. **Benefits**: Office automation systems aim to improve productivity and efficiency by reducing manual effort, storing large amounts of data in small spaces, and facilitating communication in the workplace 3.
- 5. **Tools and Technologies**: Office automation systems encompass a variety of tools such as word processing, desktop publishing, voice mail, e-mail, videoconferencing, and multimedia systems 3.

5. Describe the functionality of Decision Support System?

The functionality of a Decision Support System (DSS) can be described as follows:

- 1. **Data Analysis and Synthesis**: A DSS analyzes and synthesizes vast amounts of data to assist in decision-making, producing reports that may project revenue, sales, or manage inventory 1.
- 2. **Assistance in Decision-Making**: DSS assists in decision-making activities that require judgment, determination, and a sequence of actions, aiding mid- and high-level management by analyzing unstructured data and accumulating information to solve problems 2.
- 3. **Accessing Information from Various Systems**: DSS accesses large volumes of information generated from various related information systems involved in organizational business processes, such as office automation systems and transaction processing systems 3.
- 4. **User Interface and Information Presentation**: It provides a user interface for easy system navigation and presents information beyond

- the usual reports and summaries, including comparative sales figures, projected revenue figures, and consequences of different decisions 4.
- 5. **Application in Various Industries**: DSS is used in a broad array of industries, such as in medicine for diagnostics and prescriptions, and in GPS route planning for finding the fastest and best routes between two points.

6.How Knowledge Work Systems works?

- 1. **Specialized Tools**: KWS provides knowledge workers with specialized tools such as powerful graphics, analytical tools, and communications and document management capabilities <u>1</u>.
- 2. **Handling Complex Data**: KWS handles large volumes of complex data and information, allowing knowledge workers to analyze, model, and process information to generate insights and make informed decisions.
- 3. **Access to External Knowledge Bases**: KWS requires strong links to external knowledge bases, providing knowledge workers with access to external databases and information sources to enhance their work.
- 4. **Support for Collaboration**: KWS facilitates collaboration and information sharing among knowledge workers through features like intranets, wikis, and other collaborative tools, enabling real-time data sharing and idea generation <u>2</u>.
- 5. **Support for Creativity and Innovation**: KWS fosters innovation by providing tools and systems that help knowledge workers create, manage, and disseminate new information and knowledge within and outside the organization 2.
- 6. **Optimization for Specific Tasks**: KWS is optimized for specific tasks performed by knowledge workers, such as engineering workstations, virtual reality systems, investment workstations, and human resource systems 3.
- 7. **Enhancing Productivity**: KWS aims to enhance the productivity of knowledge workers by equipping them with the necessary tools, infrastructure, and systems to effectively perform their tasks

7. Artificial Intelligence menace what? Explain with definition?

- **Definition of AI**: AI involves the simulation of human intelligence processes by machines, particularly computer systems. It encompasses specific applications such as expert systems, natural language processing, speech recognition, and machine vision 1.
- Goals of AI: The primary goals of AI include creating expert systems that exhibit intelligent behavior, implementing human intelligence in machines, and developing computer functions associated with human intelligence, such as reasoning, learning, and problem-solving 2.
- Contributions to AI: AI is a multidisciplinary field based on disciplines such as Computer Science, Biology, Psychology, Linguistics, Mathematics, and Engineering. It aims to develop computer functions associated with human intelligence, such as reasoning, learning, and problem-solving 2.
- Potential Menace of AI: There are concerns about the potential impact of AI on human employment, with industries looking to automate certain jobs through intelligent machinery. This has raised concerns about the displacement of human workers and the potential obsolescence of certain skills 3.
- Ethical Considerations: AI systems carry human biases, and there are concerns about the ethical implications of AI, including its potential impact on employment and the need for transparency and trust in the systems

8.A. What is Formal information? Example?

B. What is Informal information? Example.

A. Formal Information:

1. **Definition**: Formal information refers to communication that follows predefined rules, systems, and guidelines. It is structured, official, and often written in nature.

2. **Examples**:

- o Formal reports or memos within an organization.
- o Official letters or emails sent to clients or business partners.
- o Legal documents such as contracts or agreements.
- Academic papers or research articles.
- o Financial statements or annual reports.

B. Informal Information:

1. **Definition**: Informal information refers to communication that does not follow formal methods or rigid rules. It is more casual, spontaneous, and often oral in nature.

2. Examples:

Conversations among friends or family members.

- Casual emails or text messages.
- Social media posts or comments.
- Watercooler chats or informal discussions in the workplace.
- Rumors or gossip that spread through informal channels.

9. What is called Group Decision Support Systems (GDSS)?

Group Decision Support System (GDSS):

- 1. **Definition**: A Group Decision Support System (GDSS) is an interactive computer-based system designed to facilitate a group of decision-makers in finding solutions to unstructured problems. It allows multiple users to interact simultaneously to arrive at decisions as a group, improving the quality and effectiveness of group meetings.
- 2. **Features and Components**: GDSS provides support for various group decision-making activities such as file sharing, integrating individual opinions with those of the group, communication, modeling group actions, and other interactions requiring input from group members.
- 3. **Technology and Tools**: GDSS utilizes groupware, web-based tools for electronic meetings, and video conferencing to support communication and decision-making processes. It involves electronic meetings where each participant is provided with a computer connected to each other, facilitators' computers, and file servers.
- 4. **Enhancing Group Decision-Making**: GDSS proponents claim that these technologies can advance participation, streamline group communications, foster learning, and help promote group work. It aims to improve decision-making processes and outcomes in group settings.