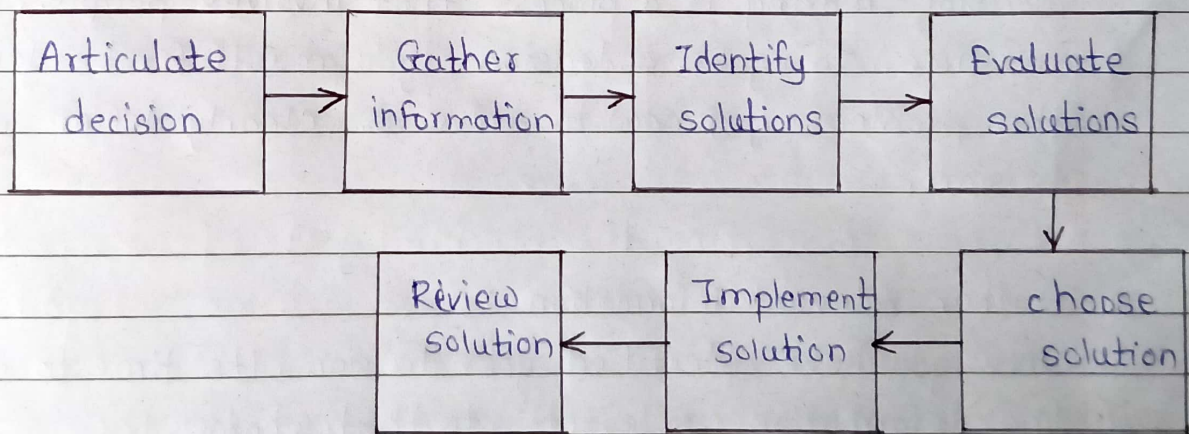1. What is decision making ? Explain the concept.
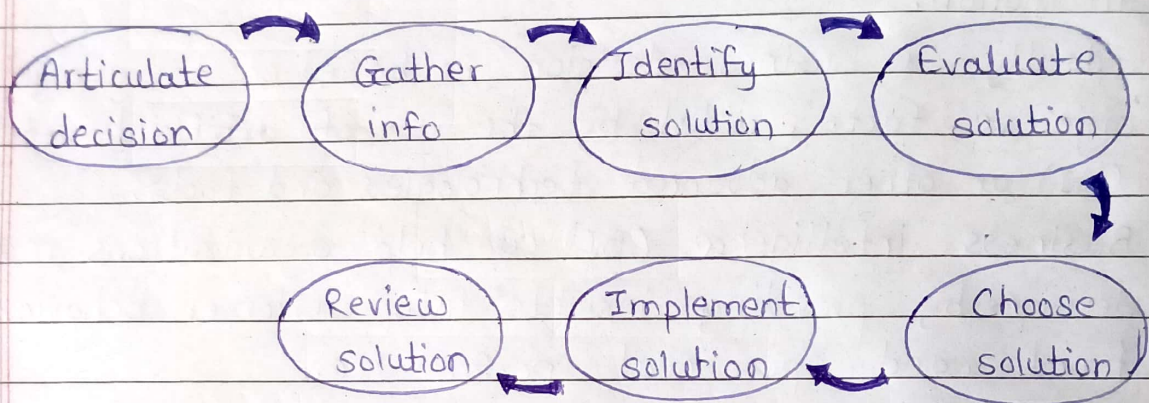
- A decision - making process is a series of steps one or more individuals takes to determine the best option or course of action to address a specific problem or situation.

- Often, managers and executives use the process to plan how to carry out business intiatives or set specific actions in motion.

- Ideally, a business decision is based on the analysis of objective facts, aided by the use of artificial intelligence (AI) or other advanced technologies and tools.

- Business intelligence (BI) can help organizations make better decisions by providing insights into customer behavior, market trends, and operational performance.

- The decision making process :

Articulate decision	→	Gather information	→	Identify solutions	→	Evaluate solutions

Review Solution	←	Implement Solution	←	choose solution

- BI tools can help decision-makers access accurate and timely information from various sources, which can lead eto other better decisions.

- In simple words, BI The decision-making process is a way to explore alternatives and find the best solution to a problem.

2. What are the steps for making Decision ?

- The Decision making is the process of making choices by identifying a decision, gathering information and assessing alternative resolutions.
- There are 7 steps of decision-making process.

Articulate decision → Gather info → Identify solution → Evaluate solution → Choose solution → Implement solution → Review Solution

1. Articulate decision : / Identify the decision :
Decision-making is a process that involves people, resource and time. To make a decision, you must first identify the problem you need to solve or. Clearly define your decision.

2. Gather relevant information :
Once you have identified your decision, it's time to gather the information relevant to that choice.
Effective decision making requires information from many different sources. Gathering information helps your team to identify different solutions to your problem.

3. Identify solutions / alternatives :
Identify possible solutions to your problem. There is usually more than one option to consider when trying to meet a

goal. For example, if your company is trying to gain more engagement on social media, your alternatives could include paid social advertisements, a change in your organic social media strategy or a combination of the two.

4. Evaluate solution :

The team should carefully evaluate each possible solution, identifying both its strengths and weaknesses.

5. Choose solution :
- The next step is to make your final decision.
- Consider all the information you've collected and how this decision may affect each stakeholder.
- Effective decision making involves creating creative problem solving and thinking out of the box, so don't limit you or your teams to clear-cut options.

6. Implement solution.
You're now ready to take some positive action by beginning to implement the alternative choose in step 5.
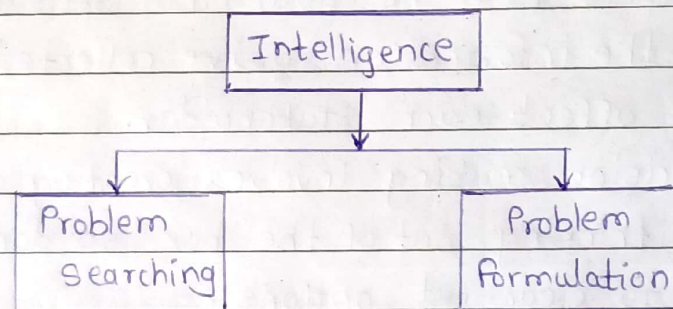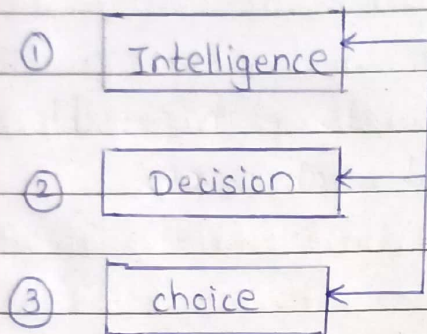
7. Review solution.
In this final step, consider the results of your decision and evaluate whether or not it has resolved the need you identified in step 1.
If the decision has not met the identified need, you may want to repeat certain steps of the process to make a new decision.

Q3 What is simon's decision making process, explain with neat labeled diagram.

→

steps :-

① Intelligence

② Decision

③ choice

Intelligence

Problem Searching | Problem Formulation

1. Decision making is very essential part for managers, leaders employees need to make effective decisions that will cause benefit.

2. It helps in reaching the beneficial goals of organization

3. Simon argued that the decisions are an integral and critical part of an organizations.

4. If they are taken correctly on time, the they may harm the organization goals.

A) Intelligence :-

- It is 1st step of decision making process.

- In this some experts identify the problems of organization.

- management try to find a solution that can be applied to the system.

- To provide effective environment.

B) Decision :
- It is the 2nd step of decision making process.
- It contains study of several strategies which can be applied to find the solution to problem.
- The main characteristic is analysis of strategies based on merits and demerit.
- It decides merits & demerits and decide which strategy is best for given problem.

c] Choice :
- It is 3rd and last step of decision making process.
- In this management decides the best suited strategy, which can be applied based on the merit and demerits in previous stage.
- In this, it qualitative & quantitative analysis of the strategies and requires creativity & judgemental skills.

Q.4. Explain in detail the goals of BI.
→
- Bussiness Intelligence (BI) is a set of tools that helps you trasform your data into insightful, narrative, actionable information.
- BI helps you measure your business performance and identifiy oppurtunities for improvement.

Goals of BI :

1. Imformation must be easily accessible.
   End users must be able to access information in a timely.

fashion so that their timely decision making is not compromised by this.

2. Information must be easy to understand.
Information must be intuitive and obvious to end users and portrained in such a way that does not leave room for misinterpretation, ambiguity and confusion.

3. Business intelligence tools must be easy to use.
To build upon the previous goal, the BI tool needs to be intuitive, clear and accessible to the end users. Remember that end users don't need to be technical, nor super users to be able to use these tools in order to support their work and objectives.

4. Information must come from a trusted source of truth.
The data quality from which the information is based on calculated and derived from must meet the needs of the business.
At the same time, the information also needs to be current, complete, valid, accurate, and clearly defined.

5. Information must be secure.
The information will only be made available to its intended audience and users, while following your organization's information and data security policies and guidelines and any other applicable legislation. (ex. FIPPA, PCI, CASL

Q.5 Explain the applications of BI in treatment of patients.

- Many industries, including healthcare, are seeing a significant transformation aided by BI.
- Business Intelligence (BI) is used to deduce meaningful information from raw, unstructured data.
- The healthcare industry uses business intelligence to innovate patient care, reduce costs, earn better revenue improve claims managements.
- It also plays a role in making healthcare more accessible.

1. Enhanced patient care.
- BI can revolutionise patient case systems and lead to benefits for both patients and the healthcare industry.
- Today, most people are health-conscious.
- They use devices to monitor their medical data such as heart rate, blood pressure, sugar levels, etc. This data can be made available to healthcare providers through proper channels for centralised storage and access.
- BI applications can use the data and make it easier to monitor and treat patients.

2. Improved levels of preventive healthcare.
- Accessibility to the complete historical data of patients (clinical, genetic, social, etc). helps BI tools predicts the risk of diseases.
- Predictive analytics in healthcare can also help understand the risk of relapse and create dynamic treatment plans that can cater speedily to patient's health issues in case of relapses.
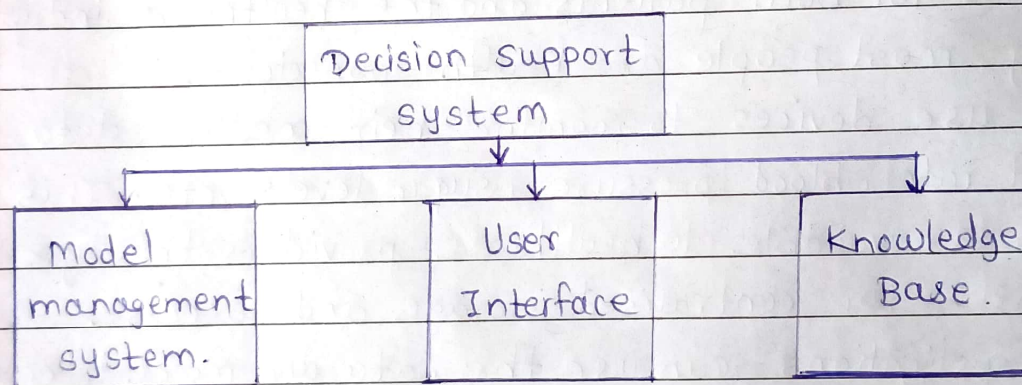
3. Better cost management :
BI tools can use patient inflow data from hospitals to ensure optimal utilisation of healthcare infrastructure similarly, fund allocation among departments can be optimise by leveraging insights from BI tools.

Q.6. Explain components of DSS.

Decision Support System (DSS) :
- A DSS is an information system that aids a business in decision-making activities that require judgement, determination and a sequence of actions.
- Components of a DSS are :

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            ┌─────────────────┐
            │ Decision support │
            │     system       │
            └────────┬────────┘
                     ↓
    ┌────────────────┼────────────────┐
    ↓                ↓                ↓
┌─────────┐    ┌──────────┐    ┌───────────┐
│ Model   │    │  User    │    │ Knowledge │
│management│    │Interface │    │  Base.    │
│ system. │    │          │    │           │
└─────────┘    └──────────┘    └───────────┘
```

1. Model management system :
The model management system stores models that managers can use in their decision-making, The models are used in decision-making regarding the financial health of the organization and forcasting demand for good or service.

2. User Interface :
The user interface includes tools that help the end-user of DSS to navigate through the system.

3. Knowledge Base.

The knowledge base includes information from internal sources and external sources (newspapers & online databases.).