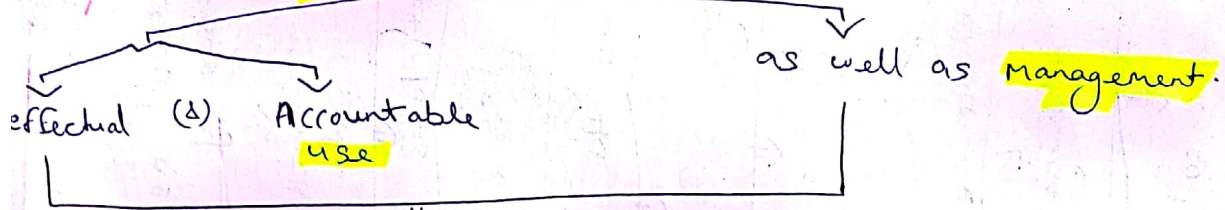
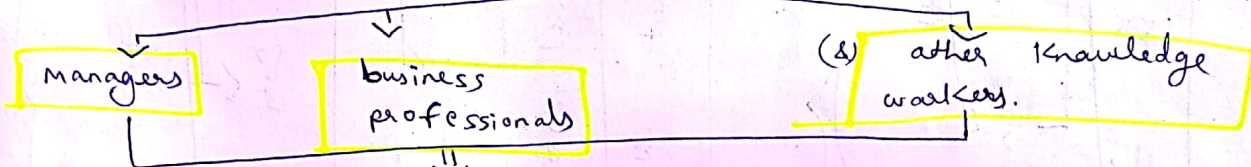


* Ch-2 of ISCA ⇒ Information System Concepts.

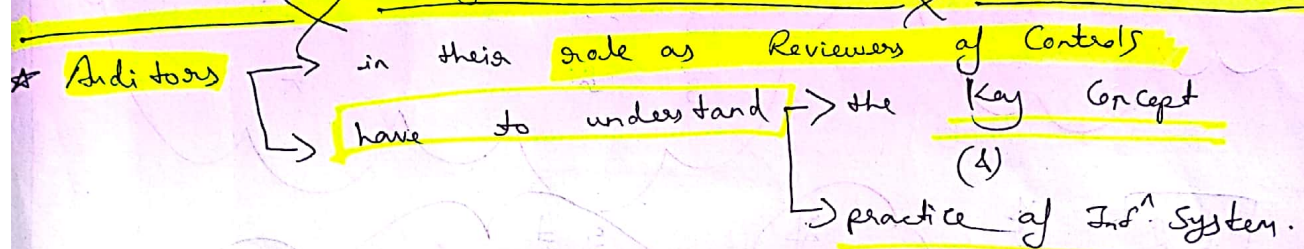
* An understanding of the



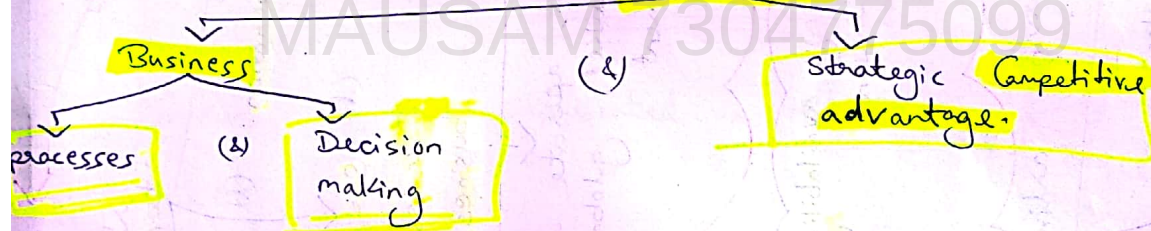
of info System is imp. for



in today's inter networked enterprises.



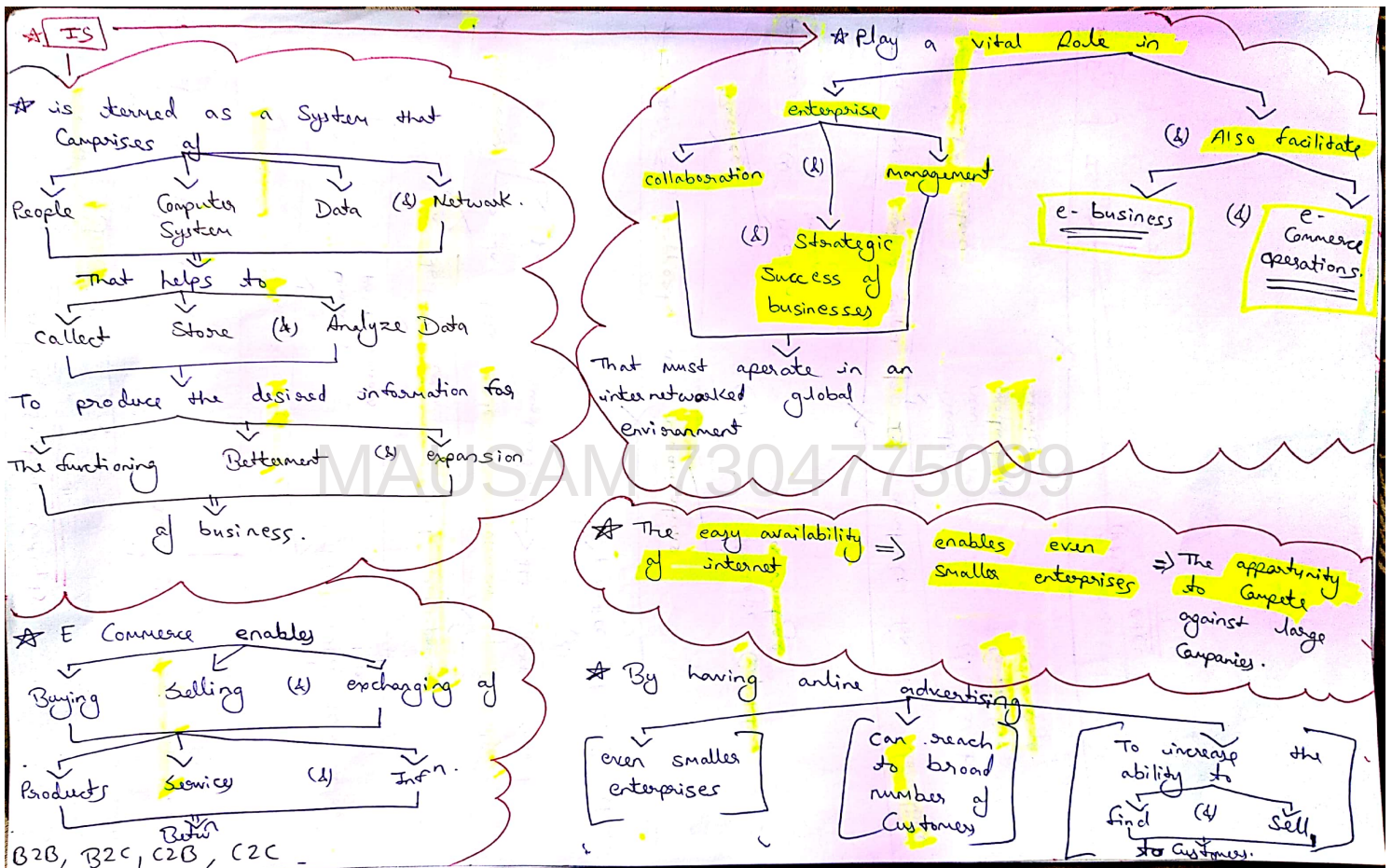
* IS [Info Sys] Supports an organisations

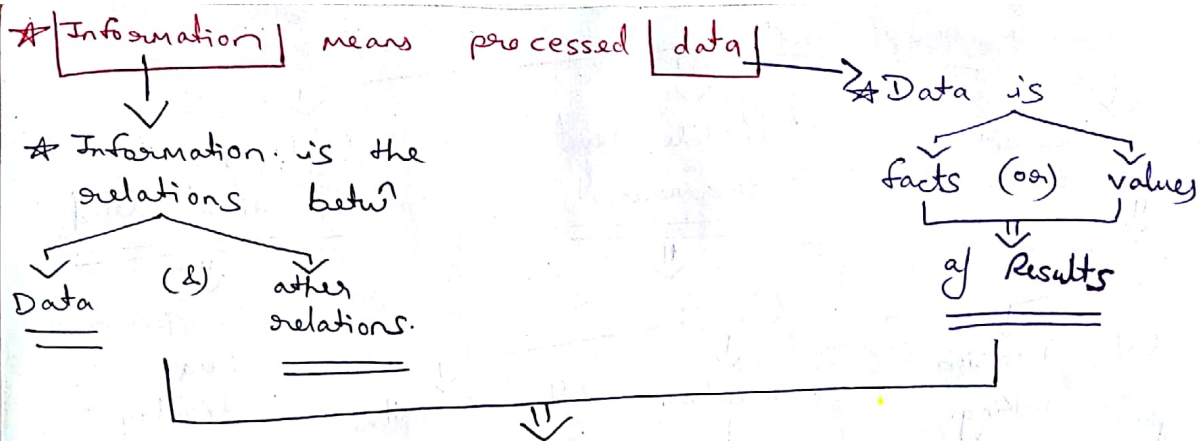


* There are various types of IS available for use to achieve

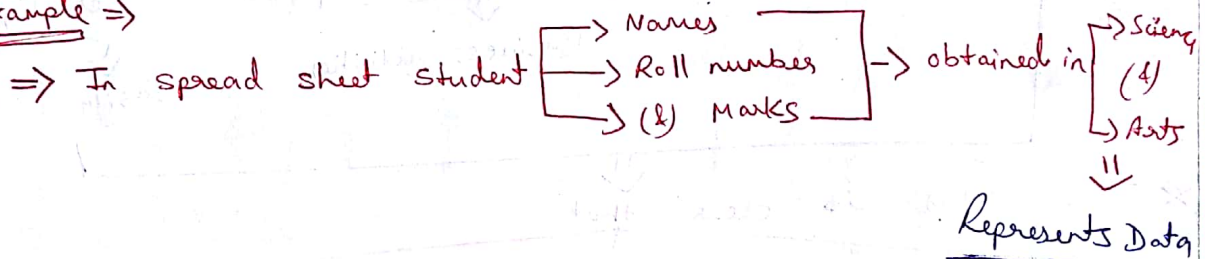


* E.g of IS are (MIS) (DSS) (KMS) etc.

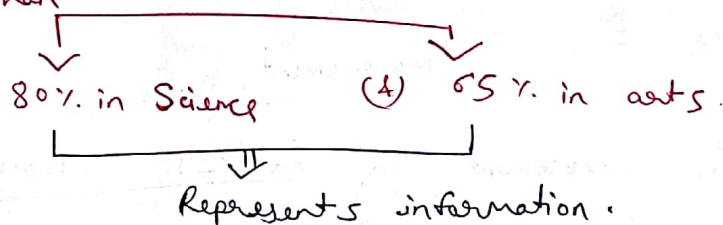




★ Example ⇒



⇒ Whereas the graph that shows the % of students acquiring more than



★ Information may be represented in the form of

- text
- graph
- picture
- voice
- video etc

★ [Collection of data is not Infⁿ] (4) [Collection of infⁿ is not Knowledge.]

★ Infⁿ relates to

- Description
- Definition (or)
- Perspective

What, who, when, where

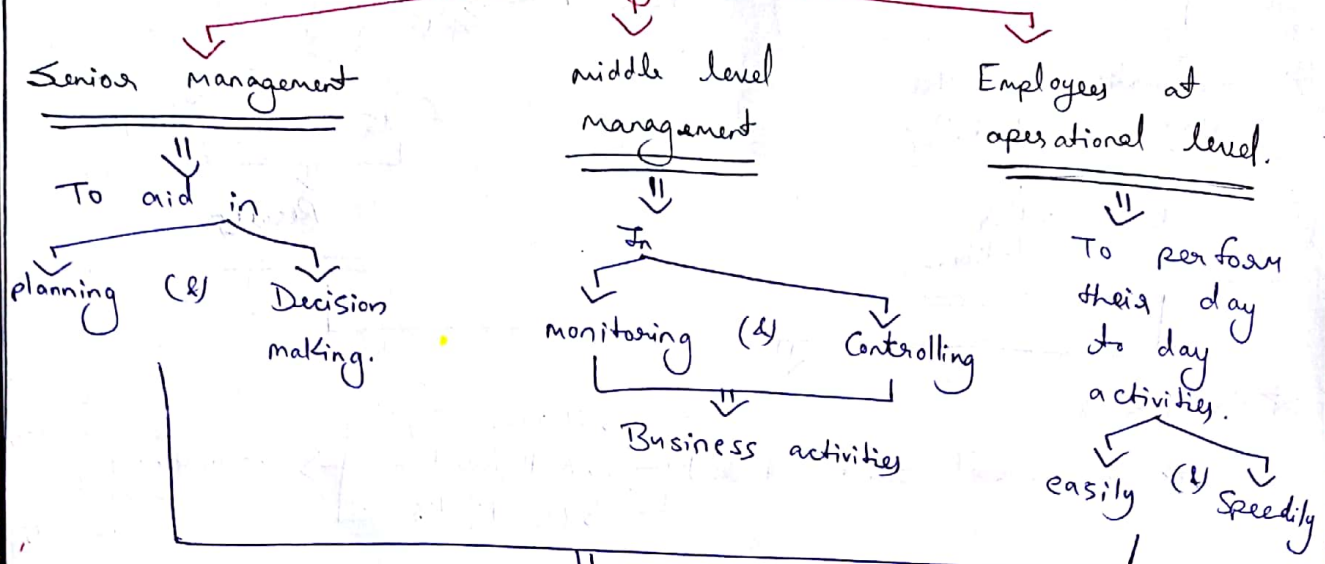
★ Infⁿ is essential because



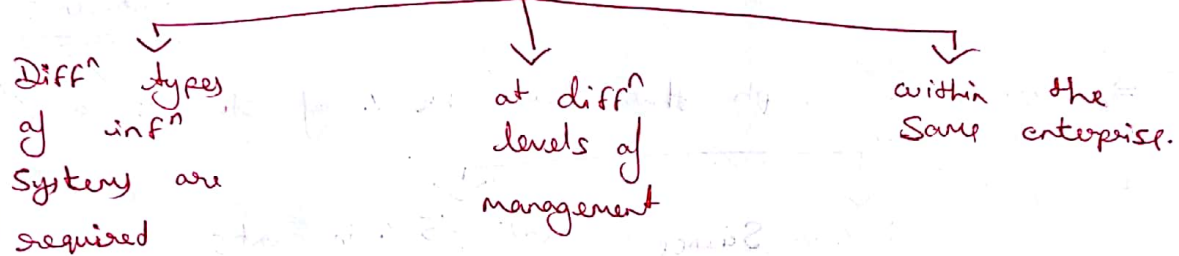
★ Information produced by an infⁿ system can be represented by number of ways

- Paper Report
- Visual Display
- multimedia document
- electronic messages
- graphics image
- (4) Audio responses.

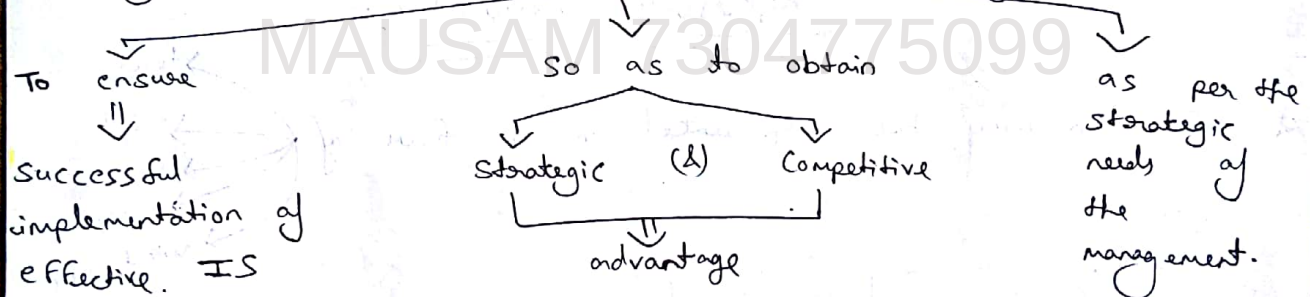
★ The Requirement of infⁿ by



★ This makes it clear that

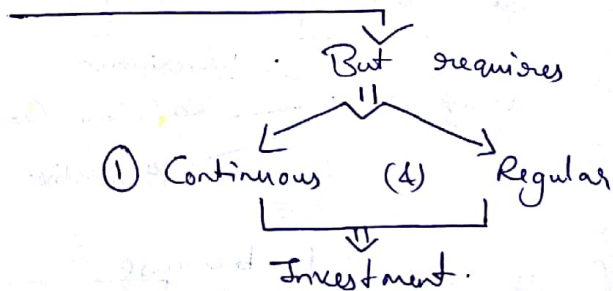


★ Long term investment in an IT strategy is required



★ This cannot be achieved by

- Simply making 1 time heavy investment.
- in 1 (or) more business applications



② Monitoring effective implementation in the required area

③ So as to ensure that IS acts as a foundation to sustain and maintain growth.

★ Attributes of Information

① Availability

★ Infⁿ is useless

↓
if it is not available at the time of need.

② Current / Updated.

★ Information should be refreshed from time to time

⇒ e.g. → Broker who want the latest information about the stock market

③ Completeness (A) Adequacy

→ The infⁿ provided should be Complete (A) Adequate in itself

→ because only Complete infⁿ can be used in policy making.

→ e.g. → The position of student in a class can be find out only after having infⁿ of the marks of all students (A) total number of students in a class

④ Frequency [No. of times.]

★ The frequency with which information is transmitted (or) Received

↓
affects its value.

⇒ e.g. →

① The weekly report of sales shows little change as compared to the quarterly

② And contribute less for accessing salesman capability

★ And should be designed in such a way that it assists in

Decision making

Solving problems

initiating planning

Controlling (A) Searching

★ According to the type of infⁿ used. [★]

⑤ Mode and Format

① The Modes of Commⁿ infⁿ to humans

should be in such a way

That it will be easily understandable by the people.

↓
may be in the form of

Voice

Text

(A) Combination of both.

② Format plays an important role in communicating the Ideas.

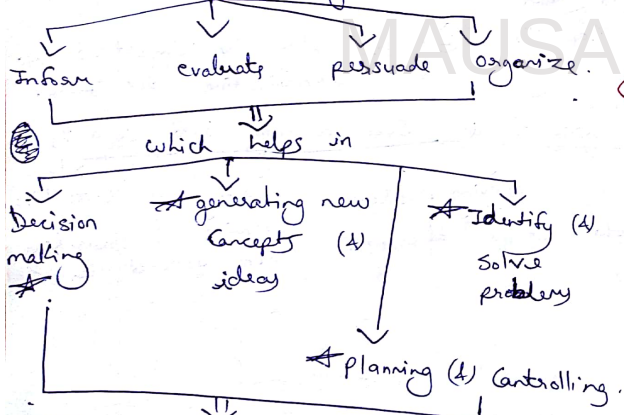
↓
it assists in
Decision making
Solving problems
initiating planning
Controlling (A) Searching
diffⁿ format can be

⑥ Purpose/objective

1) Infⁿ must have purpose/objective
at the time it is transmitted
to a person (or) machine,
otherwise it is simple data.

2) Purpose depends upon activities in an organisation.

3) The basic purpose of infⁿ is to.



★ Rate

★ The rate of transmission of infⁿ
★ may be represented by the time required to understand a particular situation.

★ Useful infⁿ is the one

which is transmitted at the rate.

which matches with the rate at which the recipient wants to receive.

e.g. =>

① The infⁿ available from internet site should be available at a click of mouse.

★ Reliability

★ It is a measure of

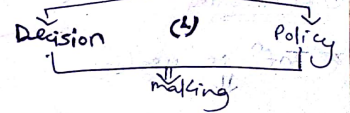
failure (or) success.

of using infⁿ for Decision making.

★ If infⁿ leads to correct decision on many occasions, we say the infⁿ is reliable.

★ Transparency

★ Essential in



e.g. =>

★ Total amount of adv. does not give true picture of fund utilization for decision about future course of action.

★ Rather Deposit-advance Ratio is more transparent infⁿ that.

★ Validity

★ It measures how close the infⁿ is to the purpose for which it is served.

★ Value of infⁿ

★ It is defined as difference betwⁿ

The value of the
change in decision
behaviours

Caused by

The Infⁿ

(4)

The Cost
of Infⁿ

e.g. ⇒

→ Given a set of possible decisions

→ A decision-maker may select 1 on the basis of availⁿ Infⁿ

→ IF new infⁿ causes a diffⁿ decision to be made

→ So here, the value of new infⁿ is the difference betwⁿ

value of the change
in decision behaviours

Caused by

The Infⁿ

(4)

The Cost
of Infⁿ

★ System

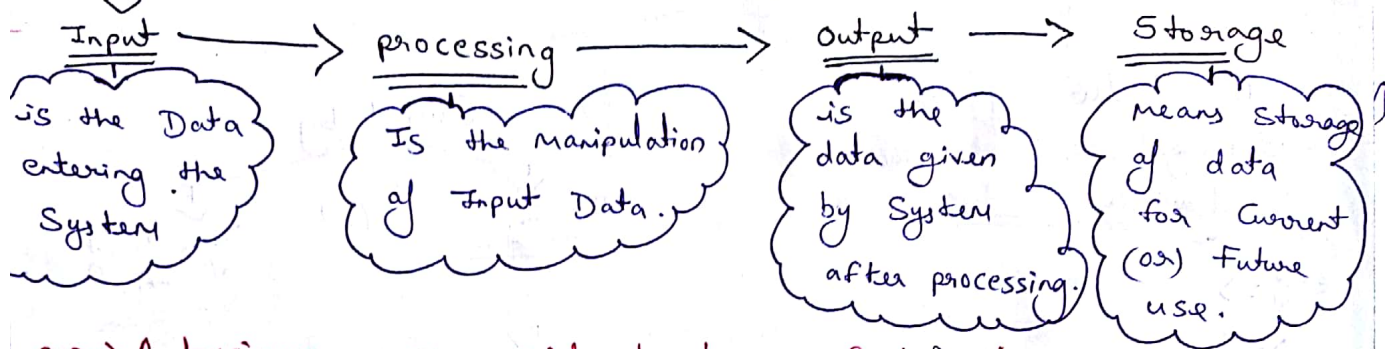
is a group of
inter Connected
Components

working towards the
accomplishment of a
Common goal

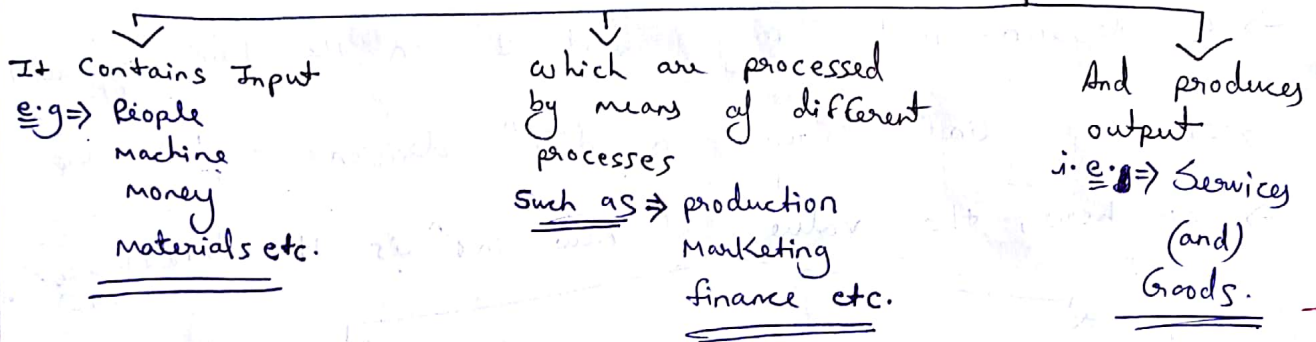
By accepting
inputs and
producing outputs

in an ordered
transformation process

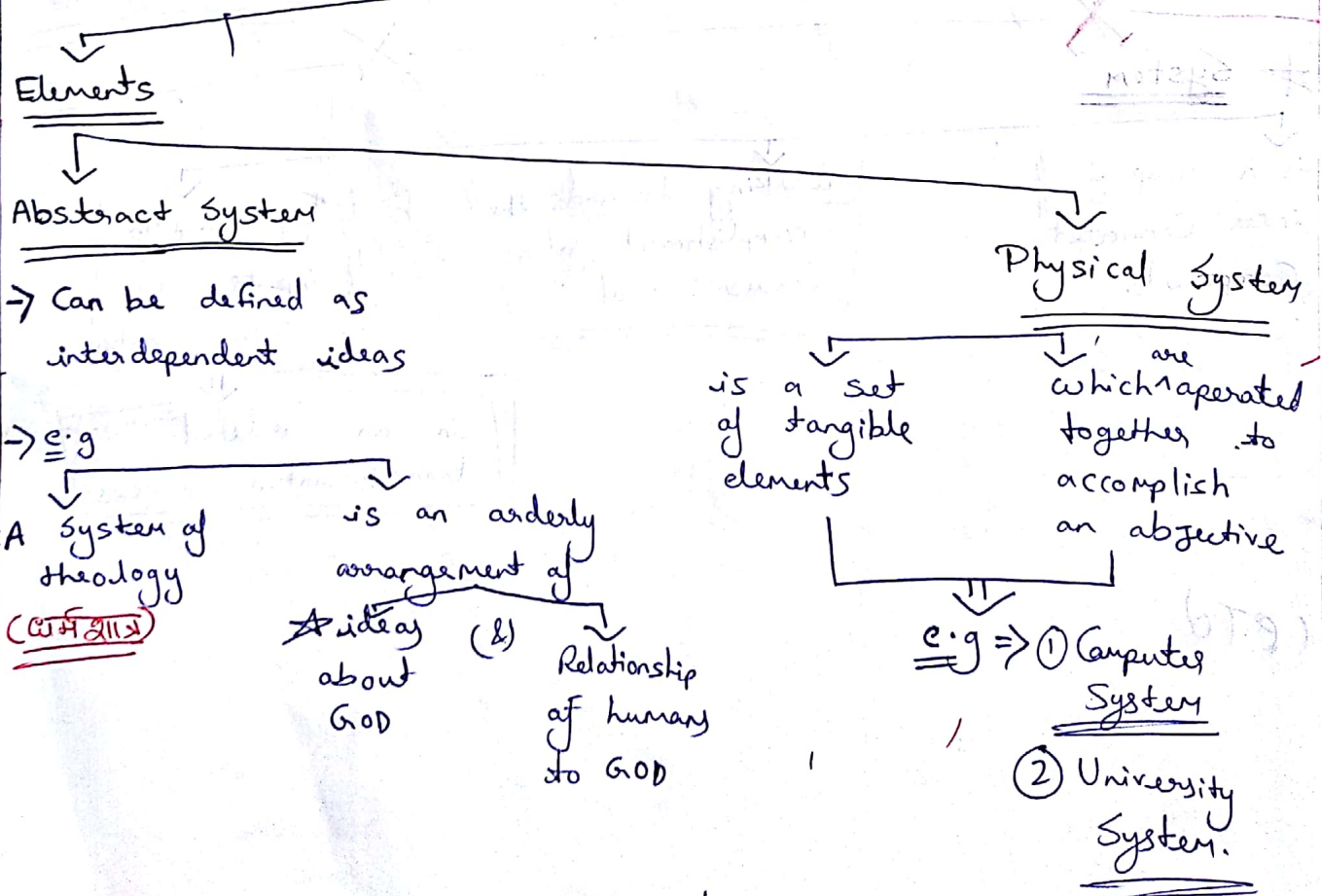
* A System generally Consist of



e.g. ⇒ A business is said to be a System because



* Classification of System based on various parameters like:



★ On the basis of working / output

Deterministic System

→ Operates in a predictable manner

→ e.g. Software

⇒ that performs a set of instructions

⇒ is a deterministic system

Probabilistic System

★ Can be defined in terms of probable behaviours

★ e.g. ⇒ Inventory system is a probabilistic system where

↓
The average demand.

↓
The average time for Replenishment.

may be defined.

★ But the exact value at any given time is not known.

★ On the basis of Interactive behaviour

how the system interact with environment.

Open System

⇒ Interacts with other system in its environment

⇒ changes as per changes in the environment.

e.g. ⇒ Infⁿ system is an open system because

it takes input from environment. And produces output to the environment.

Which changes as per the changes in the environment.

Closed System

⇒ Does not interact with other system in its environment.

⇒ Does not change with the changes in environment.

e.g. ⇒

→ Sealed digital watch.

which is a system.

Composed of a no. of components

that work in a Cooperative fashion

Designed to perform some specific task.

★ This is a closed system as it is completely isolated from its environment for its operation.

★ On the basis of degree of human intervention.

Manual System

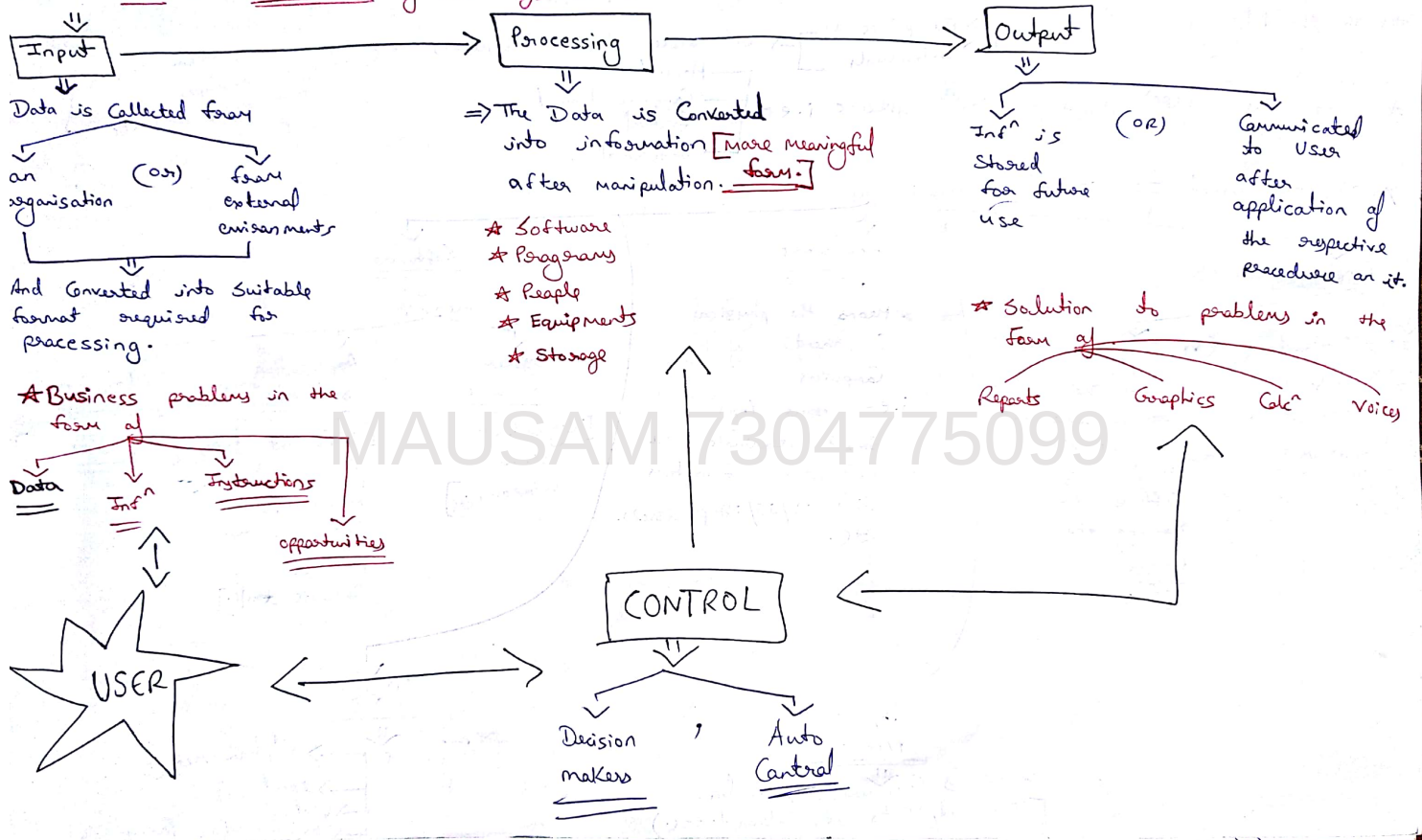
★ Are done by human

★ The activities like
→ Data Collection
→ Maintenance
→ Final Reporting

Automated System.

★ Are carried out by computer system.

★ The STEPS & FUNCTIONS of Infⁿ System.

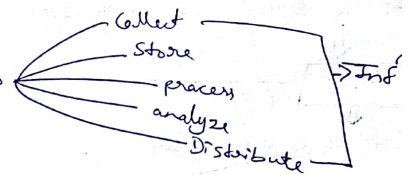


★ Infⁿ Systems and its Components

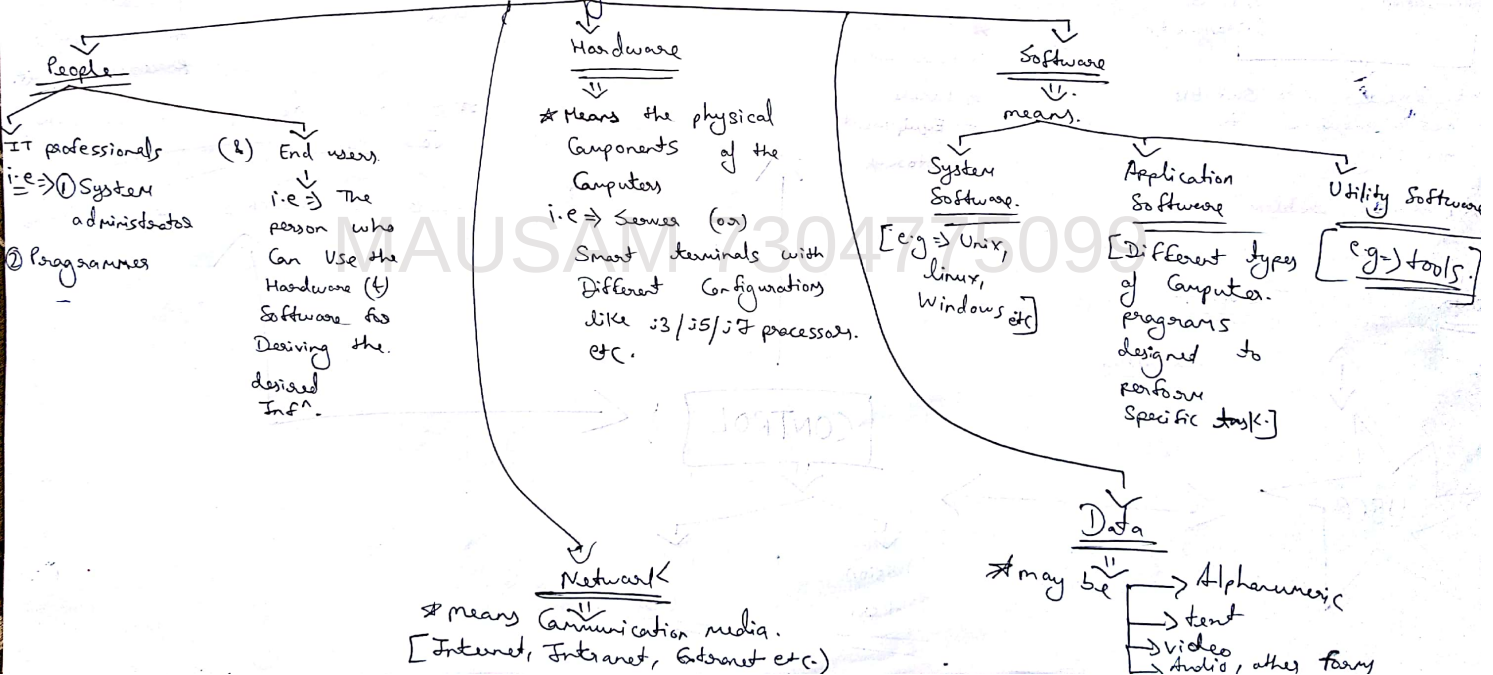
★ With the help of infⁿ systems Enterprises (t) Individually → are able to use Computers to

★ There are Diffⁿ type of infⁿ systems i.e.

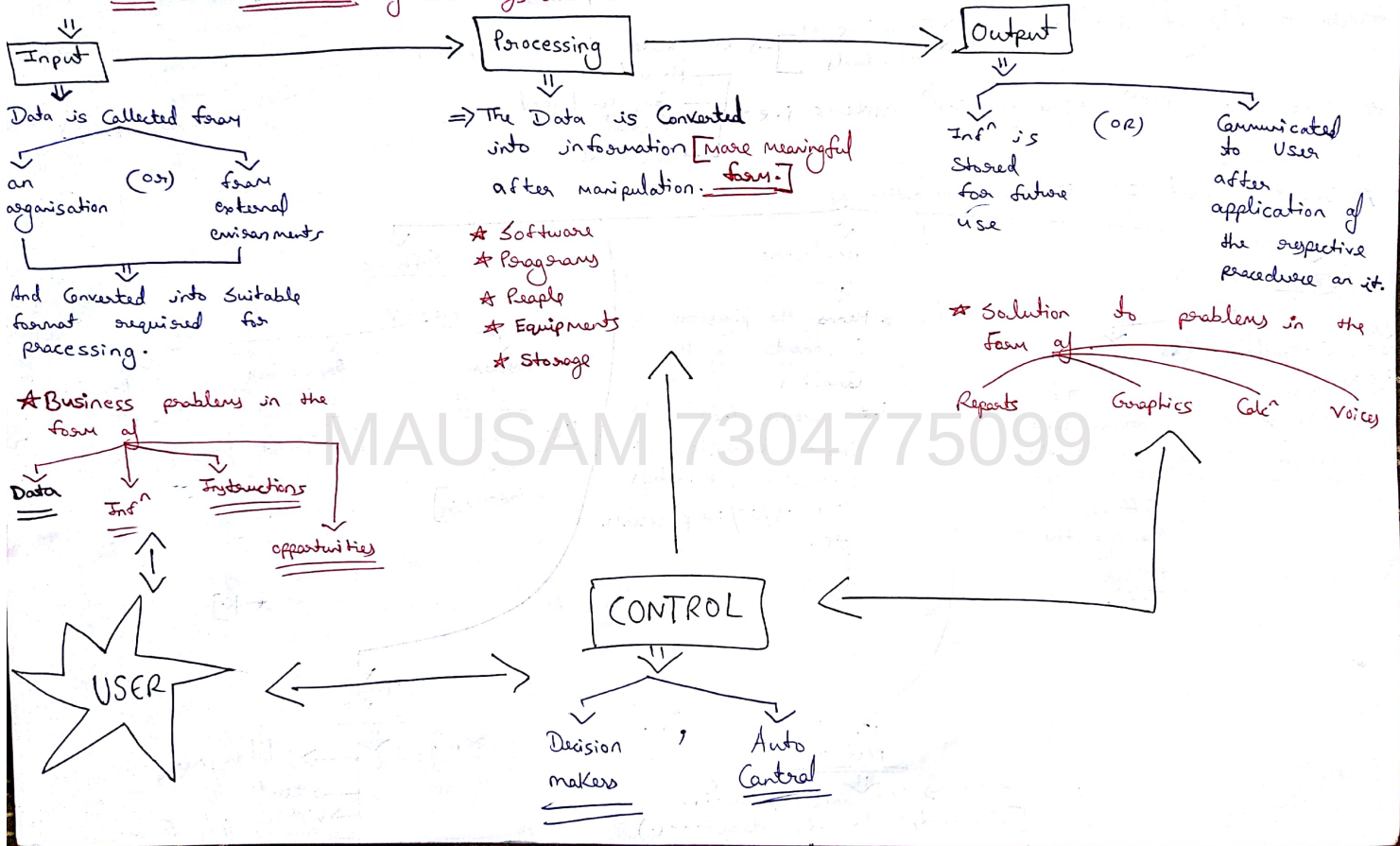
- Manual
- Computer based
- formal
- Informal



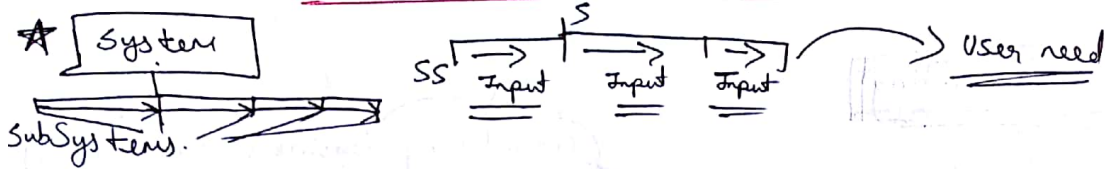
★ Computer based IS is a Combination of



★ The STEPS & FUNCTIONS of Infⁿ System.



★ Some of the important characteristics of Computer based information Systems are given as follows:



① All Systems work for predetermined objective. And Accordingly Designed & Developed

② A System has a number of Interrelated & Interdependent SubSystems

③ No Sub System can function in Isolation. It depends upon other SubSystems for inputs

③ IF (or) 1 Subsystem Component of System fails

★ In most of the cases the whole system does not work. However it depends upon "HOW THE SUBSYSTEMS ARE INTERRELATED"

④ ★ The way a subsystem works with each other is called interaction

★ To achieve the goal of the system.

★ The goal of individual subsystem is of lower priority than the goal of the entire system.

⑤ The work Done by Individual Subsystem is integrated to achieve the central goal of the system.

★ MAJOR AREAS of Computer Based Applications are.

★ Finance and Accounting

★ The main goal of this subsystem is to ensure

Considering business functions as whole system.

Financial viability of the organisation

enforce financial discipline

And

Plan

(A)

Monitor

The financial Budget

★ It also helps in

- forecasting. Revenues.
- Determining the best resources Use of funds.
- managing other financial resources.

★ Typical sub application areas in finance and Accounting are

Financial Accounting

General Ledger

A/C Receivable/
Payable

Asset Accounting

Investment

Cash

Treasury

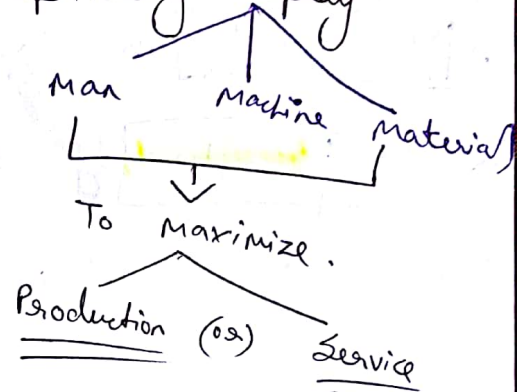
Fund

management

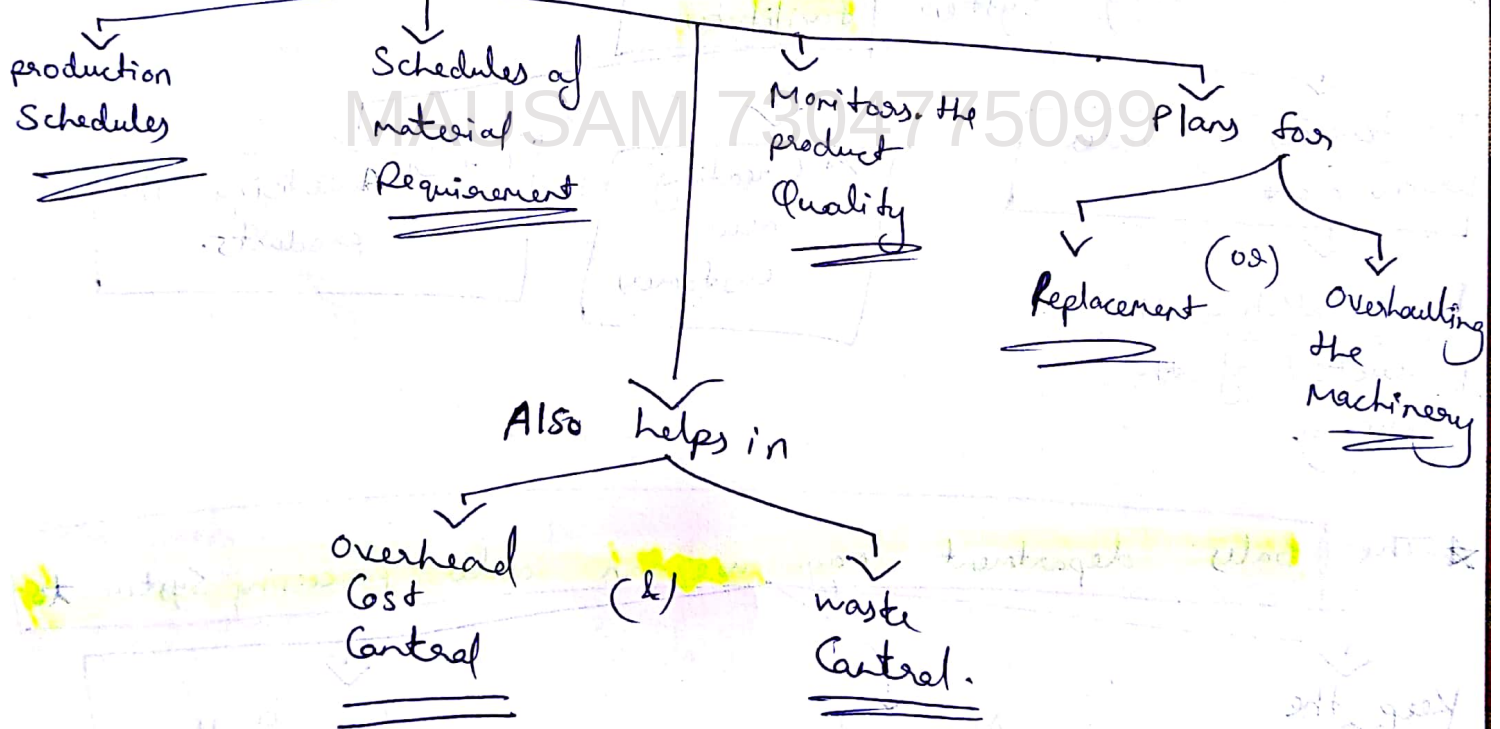
And  Balance Sheet.

★ Production (or) Manufacturing

★ The objective of this Subsystem is to optimally deploy



★ The System Generates



★ Marketing and Sales (M & S)

★ M & S activities have a Key Role for running a Business Successfully in a competitive environment.

★ The objective of this Subsystem ^(M & S) is

★ To Maximize the Sales

★ Ensure Customer Satisfaction.

★ The marketing System facilitates

The chances of order procurement

★ Creating new Customers

(b) ★ Advertising the products.

By marketing the products of the Company.

★ The Sales department may use an order processing System to

Keep the Status (b) Track of order

★ Generate Bills for the order executed
⇒ (b) delivered to the Customer

★ Strategies for ordering Service during warranty period (b) beyond

★ Analyzing the Sales Data by Category such as by

Region

Product

Sales value.

★ The System may also be used to compute Commission for

Dealers

(os) Salesman.

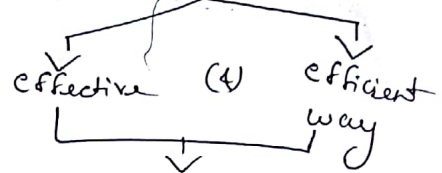
★ And thus helps the Corporate managers to take decisions in many crucial areas.

★ Human Resource Management

★ Human Resource.

is the most valuable asset for an organisation.

utilization of the same in the most.



is an important function for an enterprise.

★

effective and efficient utilization of manpower

in a dispute free environment in this key functional area

ensures to facilitate

Disruption free

Timely Services in business.

★ Human Resource management System (HRMS)

(aims to achieve this goals.)

★ Skill database maintained in HRMS with details of.

Qualification

Training

experience.

interest etc.

Helps management for

Allocating manpower to sight activity

at the time of need

(OR)

Starting a new project

★ Track of employees $\left[\begin{array}{l} \text{output (or)} \\ \text{efficiency} \end{array} \right] \rightarrow$ is also kept in the system.

★ Administrative Functions like

Keeping track of leave records.

(OR)

handling other related functions

Are also included in HRM system.

★ HRMS may have the following modules:

Personnel administration

Recruitment (4) Travel mand.

Promotion

Salary administ.

★ Inventory / Stores Management

Inventory management system.

is designed with a view

to keeping the track of materials in the store

is used to

Regulate the

maximum (h) Minimum
levels of stocks.

Raise Alarm at
Danger stock level
of any material.

Give timely alert for

Re-ordering
of materials

with
optimal
re-order
quantity

And facilitate
various
queries about
Inventory
like

Total inventory
value at
any time

Identification
of most
frequently
moving items
(XYZ Analysis)

Identification of
Imp. Items
in terms of
stock value.
(ABC Analysis)

★ Similarly, well designed Inventory management system for.

finished goods

(h)

Semi-finished goods

Provides important info for

Production Schedule

(h) Marketing / Sales Strategy