



COMPUTER SCIENCE & ENGINEERING

INFORMATION TECHNOLOGY

Database & Management System [DBMS]

Hand Notes For GATE, PSUs & Competitive Exam

Hand Notes

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Note : We also providing GATE, PSUs & Competitive Exam Materials [Handnotes, Shortnotes & Books], All Reports [Seminar Reports & PPT]

Goto : www.martcost.com

Databases

Tag

Data: Known fact abt any ^{entity} ~~object~~
eg: Rno, name

~~object~~ ^{active} ~~passive~~
~~entity~~ ^{data + qm}
character + behavior

~~entity~~ ^{passive}
only characteristics
no behaviour.

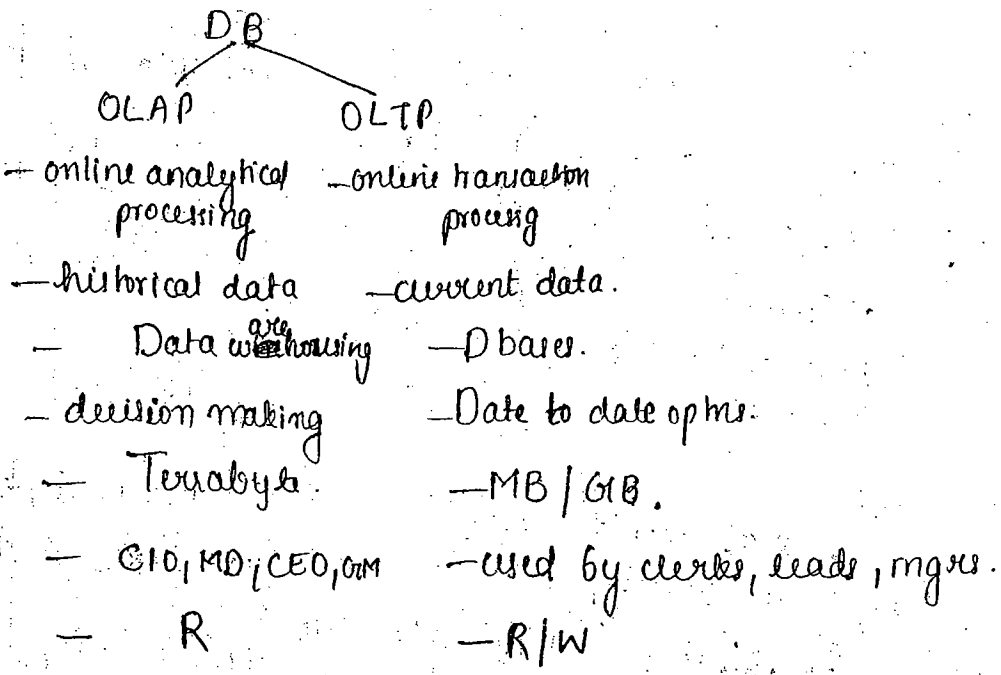
Record: Collection of interrelated data.

Rno	Name	G.no	mark
101	nyz	1	100

Database: collection of records

DBMS: s/w to collect create, modify manipulate & delete db.

DS: DB + DBMS
(db & s) Eg: Oracle, SQL server

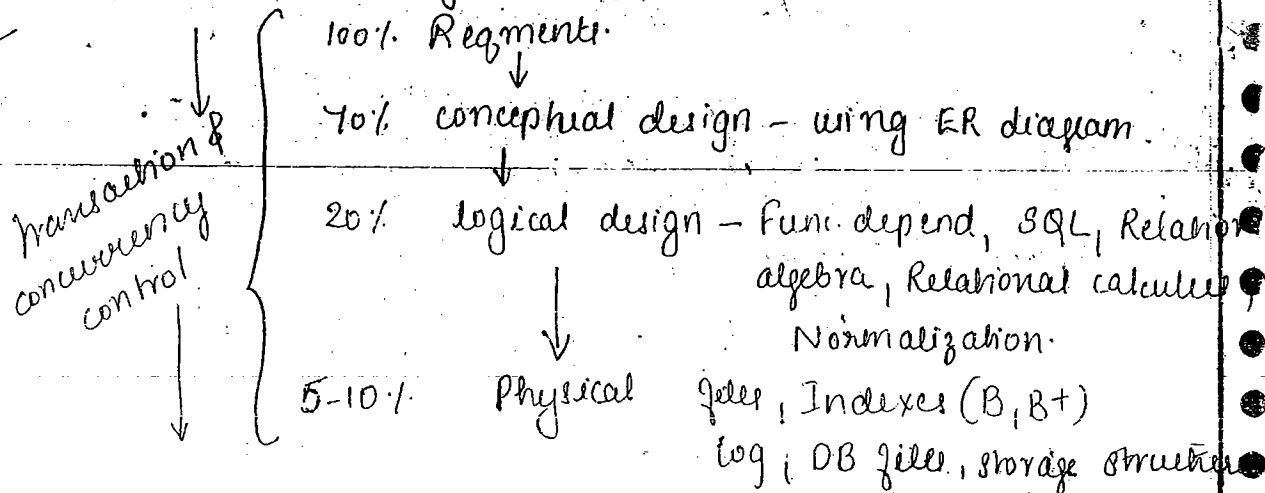


Data Mining -

- DBase
 - commercial (inventory, material) (char, number.)
 - multimedia (data stored as objects) (audio, video)
 - Deductive (stores rules)
 - Temporal (time aspect also involved)
 - Geological Info System DB (Google maps - contains images)
 - Distributed DB (eg network dbs.)

13/9/10

Database design



→ If users are more than 100, we use indexes for easy access

E-R Diagrams:

- It gives graphical representation of reqmts in terms of entities, relationships and attributes (or)

It is a domain knowledge representation in terms of entities, relationships & attributes.

ER diagram components

- Entities
- relationships
- attributes

a) Entities:

A real world object or thing with independent existence is known as entities. There are 2 types of

- physical entity (tangible)
- conceptual entity (nontangible)

Physical entity: Person, vehicle, furniture

Conceptual : Sale, course, brand image

b) Relationships:

It gives association among entities.

Btw entities, one/more relations are possible

Types of relations

- one-one (10%)
- one-many (20%)
- many-many (70%)