**2021/2022 COMP 214 ms**

1. **Database** – shared collection of logically related data organized to meet information needs of an organization.
2. **Domain** – set of values that can be assigned to an attribute   
    **importance** i) Ensures all columns and variables intended to hold values in a desired range or format hold only intended values.
3. **Tuple** – one record or one row

**Importance**i) represent all information from each field associated with a single record

1. **Buffer pool and frames –**

Buffer pool --- in-memory cache of pages read from a disk

Frames --- consists of forms and menus

1. **Super key and foreign Key**

***Super key*** - an attribute set that can uniquely identify a tuple  
***foreign key*** - column of the table used to point to the primary key of another table.

1. **Domain integrity and referential integrity**

**Domain integrity** – encompasses rules and other processes restricting the format, type, and volume of data recorded in a database

* Specifies that all columns in a relation database must be declared upon a defined domain

**Referential integrity** – relationship between tables

1. **Transaction and schedule**

**Transaction –** a sequence of logically related operations e.g., read and write

**Schedule –** a sequence of instructions that specify the chronological order in which instructions of concurrent transaction are executed

1. Conceptual modelling 3 roles
   1. Data contained in databases (entities)
   2. Constraints on data
   3. Relationship between data items
2. **Centralized db.** – Central Library

**Distributed db.** – data warehousing where large volumes of data, telephone and cellular networks.

**Network db.** – in a University Portal,   
allows record for more than one table to be associated with a single owner record of another table

Application metadata – is data that summarizes application traffic at a higher, abstracted level

e.g., analyze HTTP client errors

Database metadata – data about database data e.g.

Q2

* 1. Enables you to share attributes b2n objects such that a subclass inherits attributes from its parent class