DATA:

“It is Raw-fact which describes properties of an object”.

->object is also known Entity.

->properties are also known as Attributes.

DATABASE:

“It is a place or medium where we store the data in

Systematic & organised Manner”.

->In database we perform one of the important operation known as “CRUD OPERATION”.

->C -CREATE

->R-READ

->U-UPDATE

->D-DELETE

DATABASE MANAGEMENT SYSTEM(DBMS):

“It is Software which is used to maintain &manage the database”.

\*)it has 2 important features

1)security

2)Authorisation

->IN DBMS we communicate with database with the QUERY LANGUAGE.

->IN DBMS we store the data in File format.

->EX:XML,Microsfot Access.

RELATIONAL DATABASE MANAGEMENT SYSTEM(RDBMS):

“It is type of DBMS software in which we store the

Data in table format”.

\*)it has 2 important features

1)security

2)authorisation

\*)In RDBMS we communicate with database with the

Help of Structured Query Language(SQL).

\*)In RDBMS we store the data in Table format.

\*)Ex:ORACLE SQL,MYSQL,DB2,MS SQL ETC..

TABLE:

“Logical organisation of Rows&columns is known as table”.

->ROWS/RECORDS/TUPLES:

“Horizontal portion of table”.

->Columns/Fields/Attributes:

“Vertical portion of table”.

->Cell:

“intersection of rows&columns”.

RELATIONAL MODEL:  
“IT IS THEROTICAL CONCEPT PROPOSED BY DATA SCIENTIST CALLED E.F.CODD”.

->IN RELATIONAL MODEL WE STORE THE DATA IN

TABLE FORMAT.

->ANY DBMS WHICH FOLLOWS RELATIONAL MODEL

WILL AUTOMATICALLY BECOME RDBMS.

DATATYPES:

“IT IS USED TO STORE WHAT TYPE OF DATA TO BE STORED IN PARTICULAR MEMEORY LOCATION”.

1)CHAR:

“IT STORE ‘A-Z’,’a-z’,’0-9’,’#$@’,’75QQ’

SYNTAX:CHAR(SIZE)

->It stores characters upto 255 bytes.

1 byte =28-1=255

->It always follow fixed length of memory allocation.

2)VARCHAR:

“IT STORE ‘A-Z’,’a-z’,’0-9’,’#$@’,’75QQ’

SYNTAX: VARCHAR(SIZE)

->IT follows variable length of memory allocation.

3)Number:”it stores numerical values”.

1)Tiny int:it occupies 1 byte of memory

2)small int:it occupies 2 byte of memory.

3)mediumint:it occupies 3 byte of memory.

4)int:it occupies 4 bytes of memory.

5)Bigint:it occupies 8 bytes of memory

1)float:it occupies 4 bytes memory

2)double:it occupies 8 bytes of memory

3)Decimal:it occupies more than 8 bytes of memory

DATE:

“in mysql we follow standard format to store the date

i.e “yyyy-mm-dd” or “yy-mm-dd”

ex:”2024-02-11” or “24-02-11”

syntax:DATE

TIME:

In MYSQL we follow standard format to store the time.

i.e “HH:MM:SS”

EX:”10:12:12”

SYNTAX:TIME

DATETIME:

IN MYSQL we follow standard format to store the date&time together i.e

“yyyy-mm-dd HH:MM:SS”

Syntax:DATETIME

TIMESTAMP:

IT WORKS SAME LIKE DATE&TIME i.e

“YYYY-MM-SS HH:MM:SS”

SYNTAX:TIMESTAMP.

BLOB(BINARY LARGE OBJECT)

IT CAN STORE THE DIGITS UPTO 4GB OF SIZE.

SYNTAX:BLOB

EX:PHOTOS,VIDEOS,DOCUMENTS,FILES,MP3………