LESSON NOTES 8

Year/Level: 11   **Subjects: Computer Studies**

Strand:	**CE 1** CE 2 Application Package
Sub-strand:	CE 11.2.1 Application Software
Content Learning Outcome:	❖ Database

Lesson Notes

- ❖ Database is a program, which is used for computerized record keeping.
- ❖ It provides a place to store information and a way to organize data so that it can be accessed in an organized and timely manner.
- ❖ A database manager or database management system (DBMS) is a software package used to set up, or structure a database.
- ❖ It also used to retrieve information from a database.
- ❖ Data is organized into tables.
- ❖ Each table is made up of rows called *records* and columns called *fields*.
- ❖ Each record contains fields of information about some specific item.
- ❖ Some of the database programs include Microsoft Access, Corel Paradox, Lotus Approach, dBase IV.

Some features of database are as follows:

Locate and Display

- ❖ A basic feature of all database programs is the capability to quickly locate or find records in the database.
- ❖ Easier way to locate information is to apply a **filter** to the database.
- ❖ A filter displays the subset of records that meet certain conditions or criteria.
- ❖ The main method of locating specific kind of data for a data from a database is to create a **query**.
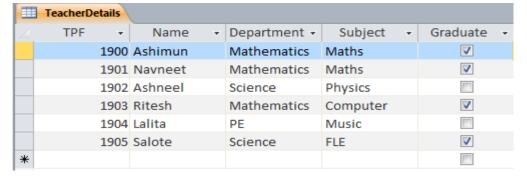- ❖ A query locates the specified records and displays only selected fields.

Sorting

- ❖ Database administrators make it easy to change the order of records in a file.
- ❖ Normally, records are displayed in the order they are entered or by key field such as social security number.
  Rearranging or sorting of records is a common feature utilized by database administrators

Example

Given below is a TeacherDetails Table containing a typical teacher database.

TPF	Name	Department	Subject	Graduate
1900	Ashimun	Mathematics	Maths	☑
1901	Navneet	Mathematics	Maths	☑
1902	Ashneel	Science	Physics	☐
1903	Ritesh	Mathematics	Computer	☑
1904	Lalita	PE	Music	☐
1905	Salote	Science	FLE	☑
*				☐

i.   How many **fields** are present in the above database?

5

ii.   How many **records** are present in the above database?

6

iii.   Identify the suitable **key field** from the TeacherDetails database?

TPF

iv.   If the field, Department was sorted in **descending** order which name will appear first?

Salote

v.   Design the **Data Dictionary** for the above database.

(Use MS – Access data type)

TeacherDetails

Field Name	Data Type	Description
Name	Text	
Department	Text	
Subject	Text	
Graduate	Yes/No	

Exercise

Study the window given below to answer the questions that follow.

CarReg	CarModel	CarColor	CarPrice	CarYear
BG806	Honda	Green	$10,000.00	2/14/1990
CF001	Toyota	White	$14,000.00	7/8/2001
CY112	Ford	Red	$11,250.00	5/4/1998
DR789	Mitsubishi	Black	$21,000.00	6/9/2000
DY490	Nissan	Blue	$11,000.00	1/3/1994
EX280	Toyota	Red	$17,000.00	5/12/2006
FN213	Honda	White	$20,000.00	5/25/2009

(i)   Which field will be suitable for the key field? Why?

(ii)   State the number of fields and records in the table.

(iii)   State the data type of the field CarPrice