



WORKSHEET 20

School: Ba Sangam College

Year / Level: 11

Subject: Computer Studies

Name of Student: _____

Strand	Information Management
Sub strand	Storing ,Managing and retrieving information
Content Learning Outcome	Discover how computers store, manage and retrieve information

Information Retrieval

This section will focus on databases which is the most widely used data storage, manipulation and retrieval tool.

A *database* is a collection of related files that can be retrieved when needed. It is usually stored in a secondary storage device e.g. hard disk or magnetic tape. The data in a database are accessed using an application program called a database management system (DBMS). Students normally confuse the definition of the two terms; database and Database management systems. A DBMS acts like a custodian for all the information in a database.

A database is a store of organization that can be recalled if and when required. The information in the database can be organized or manipulated to show specific patterns or to make selection of specific pieces of information

A *file* is a collection of data stored in secondary devices. It is composed of a number of related records each containing information about a particular subject e.g. a file of students" grade will contain a record for each student.

A *Record* contains a number of fields which are related. A field is usually an important feature of the subject whose data is stored in a record e.g. in the file of students" grade, a record may contain the following fields:

- Students Name
- ID No.
- Form
- Subject
- Marks Gained
- Grade

A *key field* is a field that can be used to locate one particular record. In the above example, the students' ID No. can be used as a key field because it *uniquely identifies the record*. Sometimes one key field may not be enough to identify a record e.g. in airline reservations, a passenger's name is not a useful key field because there can be more than one passenger with the same name traveling on the same flight. In the same way, a flight has so many passengers on it and the same flight number goes up each day making the flight number alone an unsuitable key field. But combination of a passenger's name, flight number and date of the flight will be able to uniquely identify a record.

Activity

1. Identify three situations in your community or school where people are still keeping data in traditional file system. (3m)

2. List two reasons why you feel a database is better suited for storing information than a traditional file system (2m)

3. List two reasons why the organization would still prefer to use traditional files rather than a database to store information. (2m)
