INTRODUCTION TO DATABASE

4.1 INTRODUCTION

What is data? Data is any meaningful piece of information. Data rnay be numbers, words images, etc. All organisations, be it a school factory or an office, maintain data that pertains to its students, workers, business or employees. For example a school maintains data about student's attendance, marks, medical report and even his/her assignments. But this data needs to be maintained in such a manner that it is readily available and can be read and presented in the desired format. Another important thing is that it needs to be upgraded regularly.

For all this data has to be stored permanently for long periods and numerous applications can be linked to them. This big storehouse or collection of interrelated data is known as database.

MS Access which is a part of the MS Office Package is one of the most popular Database Management System (DBMS). It is GUI (Graphical User Interface) based and is easy to use even for beginners.

4.2 DATABASES

Data management is creating, modifying, deleting and adding data in files. Database Managements System (DBMS) is the software that allows to perform these functions easily and efficiently.

A database is a structured collection of interrelated records or data that is stored in a computer system. It is a warehouse of information which is further used by various operations, day-to-day transactions or even large decision support systems.

When we collect data about a specific topic such as an attendance register, it is considered as a table. A table is the basic element of the database. Tables organise data into rows called records and columns called fields.

A database contains records and fields.

Records: This is a collection of different types of information about the same subject. In the case of a class register is school, details about each child is a record.

Fields: This is a category of information. In case of a class register the field is the category postal code.

A database allows you to sort and organise data. For example you can sort and list all students who are from Delhi and who study in class III.

Given below is an example of a students table holding data of many students