Components of GIS
Geographic Information System

GIS integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. GIS allows user to view, understand, and visualize data in many ways that reveal relationships, patterns, and trends in the form of maps, globes, reports, and charts.

5 Components

(1) Hardware   (2) Software   (3) Data

(4) People   (5) Methods

Hardware

Hardware is the computer on which GIS operates. GIS runs on wide rang from centralized computers servers to desktop computers

Software

It provides the functions and tools needed to store, analyze and display geographic information

Software components are

=> A database management system (DBMS)

=> Tools for the input and manipulation of GI.

=> Tools that support geographic query analysis, and visualization.

A graphical user interface (Gul) for easy access to tools.

People

GIS users range from technical specialists who design and maintain system.

Method

GIS operates according to a well-designed plan. Discuss this in more detail

Data

Geographic data can be collected from a house or from commercial data provider. GIS operates on data that including about things and event that occur in nature. At one time it consist of **hard-copy** data, like cartographic maps, surveyor's logs, geographic reports and description from the field.

Advance in **spatial data** collection and accuracy have allowed more and more standard digital base maps to become availabe at different scales

$$\frac{3.5}{5}$$