ManaBarnootaaHaayiliigi
ሃይሊግትምህርትቤት
Heilig School

☎0221124055 ✉1045 Adama, Ethiopia E-mail: heiligschool@gmail.com

Grade 9 Subject: ICT

Date:- 08/06/2013 -22/06/2013 E.C. 1st sem **Note: 4**

Types Of Computers

Computers can be classified into super computers, mainframe computers, minicomputers, and microcomputers (personal computers) on the basis of the following:

1. Size
2. Cost
3. Performance

(i) Speed of processing data

(ii) Storage capacity

(iii) Ability to handle input and output devices

Super computers

I/the largest, fastest, and costliest computers.
ii/ used in fields like science and defense, for designing and launching missiles, weather forecasting, biomedical research, aircraft design and automobile design.
(iii) There are only a few super computers throughout the world. Some examples are IBM Blue Gene/L, IBM Roadrunner and Cray Jaguar.

Mainframe computers

(I) small general-purpose computers, also called midrange servers. perform more complex tasks and cost
more than microcomputers.
(ii) They are larger in size and they have small to medium storage capacity.
(iii) They are used for processing data and analyzing results of experiments.
They are also used for controlling and monitoring production processes.
(iv) Some examples are PDP 11/42 and VAX 11.

l Microcomputers

(i) Microcomputers are also called Personal Computers (PCs). These computers use microprocessors.

(ii) They are small in size. Also, they do not have large storage capacities.
(iii) They can perform difficult tasks. They are used mainly for desktop publishing, accounting, statistical
analysis, graphics designing and project management.
(iv) Some examples are Apple II, IBM PC, PS/2 and Macintosh.
The classification of PCs is as:
1. **Desktops:** These PCs are those in which the case or main housing sits on a desk, with keyboard in front and screen (monitor) often on top.
2. **Portables:** These PCs are so small that they can be placed on your lap.
The portables are classified as:
(i) **Laptops:** These are small-sized machines that have the same power of a desktop. The weight of a laptop is around 7 to 12 kg. The drawback of a laptop is that it is too bulky. Examples: Toshiba 5200C and SLT/286.
(ii) **Notebooks:** These are smaller than a laptop and are designed to overcome the drawbacks of a laptop. They have the size of a notebook but are as powerful as a desktop. They weigh 3 to 4 kg.
(iii) **Palmtops or Personal Digital Assistants (PDAs):** These are handheld computers which have the size of a pocket calculator. They are not as powerful as a desktop.

characteristics of a computer

1. Speed:- Computers work at an amazing speed without any mistakes. The work, which a normal person would complete in a few hours can be done within fractions of a second by a computer. Speed of computers is measured in terms of milliseconds (10^{-3} seconds), microseconds (10^{-6} seconds) or nanoseconds (10^{-9} seconds).
2. Accuracy:- A computer performs its task with great accuracy. It never commits mistakes in processing the data. It produces errors when we enter inaccurate input, i.e., Garbage In Garbage Out (GIGO).
3. Reliability:- Computers are more reliable than human beings as they do not get bored of the repetitive tasks and never get tired.
4. Storage Capacity:- A computer can store large amount of data. It can store various documents, articles, pictures, etc., in its memory which can be used whenever required.
5. Versatility:- A computer can perform various types of jobs. On a computer system, we can listen to songs while typing text or play games while working on any other package, do calculations, make drawings, surf the net, send e-mail, etc.
6. Reduction in Manpower:- Earlier, the work in industries/factories was done by a number of persons. But with computers, it can be completed by a few persons and that too more accurately and efficiently. The advent of computer has reduced the need of manpower.
7. Paper Work can be Reduce:- The use of computer reduces the burden of paper work in any organization.

Limitations of a computer

Despite having various advantages, computers do have the following limitations that are the strengths of
human beings. These are:

1. No Decision-making Ability

Computers cannot take any decisions. Human beings assist the computer to take the decisions.

2. No Intelligence

Computers do not have intelligence of their own, they work according to the instructions given by humans.

3. No Emotions and Feelings

Computers are far away from emotions and certainly being machines, they cannot have feelings and
instincts.

