**RATU NAVULA COLLEGE**

**YEAR 11 COMPUTER STUDIES – WEEK 1**

**HOME SCHOOL PACKAGE**

**1.3 Categories of Computer**

**Lesson 23: Explain The Categories of Computers**

**A . Microcomputer**

-is also known as **personal computer** or PC

- mostly used in homes and for small business.

- usually costs about $1,000

- processor performs about 1 billion operations per second.

- carry out their own processing tasks and come in many sizes and shapes.

**Lesson 24: Describe the types of Microcomputers**

**Types of microcomputers**

1. ***Desktop PC*s**

-it’s on a desk like the ones in schools today.

-The display screen is usually placed on the top of the horizontal desktop case.

- most common ones in Fiji today are the IBM (international Business machines) compatible.

**2. *Notebook computers***

- also known as **laptops**

**-** are portable, lightweight, size of a large reference book, usually have their own carrying bags.

**3. Ultrabooks**

*-*also known as ultraportable or mini notebooks,

-are a type of very portable laptop.

-lighter and thinner and have a longer battery life than other laptops.

***4. Tablets***

*-* known as tablet computers

-are the newest and one of the most popular types of computer.

-are smaller, lighter, and generally less powerful than laptop computers.

**5. *Handheld computers***

*-*A mobile device is a general term for any type of handheld computer

- also known as **palmtop computer**.

*-*are the smallest and are designed to fit into the palm of one hand.

-Example - *Personal digital assistants (PDA)*

***Lesson 25: The Types of Servers***

**B. Server**

**-** is a hardware system dedicated to running one or more such services as a host, to

serve the needs of users of the other computers on the network.

- important components of networks.

- provide shared access to services on the network.

- software and hardware package that provides access to particular services.

**Types of Servers**

1. **database server**- is the term used to refer to the back-end system of a **database** application using client/**server** architecture.

2. **file server** -a file server is a computer responsible for the central storage and management of [data](http://searchdatamanagement.techtarget.com/definition/data) files so that other computers on the same network can access the files. A file server allows users to share information over a [network](http://searchnetworking.techtarget.com/definition/network) without having to physically transfer files by some other external storage device

3. **mail server** - Outgoing **mail servers** are known as SMTP, or Simple **Mail** Transfer Protocol, **servers**. Incoming **mail servers** come in two main varieties. POP3, or Post Office Protocol, version 3, **servers** are best known for storing sent and received messages on PCs' local hard drives.

- is an application that receives incoming e-mail from local users (people within the same [domain](http://searchsoa.techtarget.com/definition/domain)) and remote senders and forwards outgoing e-mail for delivery.

4. **print server**- is a device that connects [printers](https://en.wikipedia.org/wiki/Computer_printer) to [client computers](https://en.wikipedia.org/wiki/Client_%28computing%29) over a [network](https://en.wikipedia.org/wiki/Computer_network). It accepts [print jobs](https://en.wikipedia.org/wiki/Print_job) from the computers and sends the jobs to the appropriate printers

5**. web server**- is a computer system that processes requests via [HTTP](https://en.wikipedia.org/wiki/HTTP), the basic [network protocol](https://en.wikipedia.org/wiki/Network_protocol) used to distribute information on the [World Wide Web](https://en.wikipedia.org/wiki/World_Wide_Web).

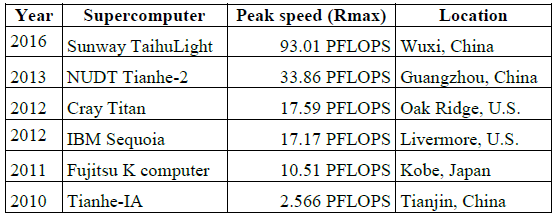
**Lesson 26**: **Features of a Supercomputer**

**C. Supercomputers**

- are the largest, fastest and most expensive types of computer.

- use their significant processing power to solve a few very difficult problems such as predicting the weather, modeling nuclear reactions and oil/space exploration. The speed of a supercomputer has reached one quadrillion instructions per second. Supercomputers are mostly used by researchers and scientists.

**Examples**



**NB**

**A petaflop** (PFLOP) is the ability of a computer to do one **quadrillion** (1 x 1015)**floating point operations per second** (FLOPS). Additionally, a petaflop can be measured as one thousand teraflops. A petaflop computer requires a massive number of computers working in parallel on the same problem.

**Review Exercise 1.3**

**T/F**

1. The term microprocessor is a synonym for the term microcomputer.

b) Most computer included a network card designed to connect a computer to the internet using standard telephone line

c) Supercomputer is the fastest type of computer in the world.

**Short Answer Questions**

1. List two ways computers are used in special education in Fiji.
2. There are three types of computer and one of which is supercomputer. What is a supercomputer?
3. Name the categories of computer which is mostly used by businesses to centralize storage, process and manage large amount of data.

**2.1 Ergonomics**

**Lesson 27: Define Ergonomics and its importance**

***Ergonomic****s -*is the study of the relationship between people and their working

environment.

**Ergonomists-** assess the fit between a person and their workplace in order to design safe, effective and

productive work systems.

The following aspects are considered:

a. The work that is to be done and the demand on the person doing the work.

b. The equipment used (it‘s size, shape and it‘s appropriateness to the task)

c. The information used (how it is presented, accessed and changed)

d. The physical environment ( temperature, humidity, lighting, noise, vibration)

e. Social environment

The physical aspects of the person considered are:

a. Body size and shape

b. Fitness and strength

c. Posture

d. The senses, especially vision, hearing and touch

e. The stresses and strains on muscles, joints, nerves

**Excercises**

a) What is ergonomics?

b) Why is ergonomics important?