PRACTICAL 5: Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing

➢ What is green computing?

Green computing, also called green technology, is the environmentally responsible use of computers and related resources. Such practices include the implementation of energy-efficient central processing units (CPUs), servers and peripherals as well as reduced resource consumption and proper disposal of electronic waste (e-waste).

Green computing" is the name attached to this movement, which represents an environmentally responsible way to reduce power and environmental waste.

The environmental impact of IT components is important in the study of data center design. Advances in energy management and energy conservation have turned computers and other computing resources into highly energy-efficient assets. Green design of data centers, office buildings and other high-energy assets has become a key part of new construction and building upgrades to make them more environmentally sustainable.

The goals of green computing are similar to green chemistry; reduce the use of hazardous materials, maximize energy efficiency during the product's lifetime, and promote the recyclability or biodegradability of defunct products and factory waste research continues into key areas such as making the use of computers as energy-efficient as possible, and designing algorithms and systems for efficiency-related computer technologies.

Simple Steps to Green Computing:

1. Develop a sustainable green computing plan
2. Recycle
3. Make environmentally sound purchase decisions
4. Reduce Paper Consumption
5. Conserve energy

➢ Why go green?

1. **Climate Change:**
First and foremost, conclusive research shows that CO2 and other emissions are causing global climate and environmental damage. preserving the planet is a valid goal because it aims to preserve life.

2. **Saving:**
Green computing can lead to serious cost saving overtime. Reduction in energy cost from server, cooling, and lighting are generating serious savings for many corporation.

3. **Reliability of power:**
As energy demands in the world go up, energy supply is declining or flat. Energy efficient systems help to ensure healthy power systems. Also, more companies aregenerating more go their own electricity, which further motivates them to keep power consumption low.

- **<u>Steps that I would take to contribute to green computing are as follows:</u>**

1. **Recycle:** Discards used or unwanted electronic equipment in a convenient and environmentally responsible manner. Computers have toxin metals and pollutants that can emit harmful emissions into the environment.
2. **Develop a sustainable green computing plan:** Discuss with your business leaders the element that should be factored into such a plan, including.
3. **Explain** to others the importance of green computing and make sure to have their support.
4. Buy energy-efficient servers, switches, laptops, desktop systems, printers, scanners and other equipment.
5. Use refillable printer cartridges.