PRACTICAL 5

Using practical examples, describe green computing. List and explain the steps that you

take to contribute to green computing.

DESCRIBING GREEN COMPUTING:

Green computing is the environmentally responsible and eco-friendly use of computers and their resources. In broader terms, it is also defined as the study of designing, manufacturing/engineering, using and disposing of computing devices in a way that reduces their environmental impact.

The strategies of Green computing have decreased the consumptionof overhead energy

and have used the server maximum through astrategy including server virtualization. But technology trends, suchas increase in data analytics and artificial intelligence, can reduce pro-in green computing strategies.

Examples of Green Computing

- Renewable Energy Sources
- Renewable energy sources don't use fossil fuel.

They are available freely, are environmentally friendly and generate less pollution. Apple, who is building a new corporate center, is planning to use most of the building's wind turbine technology, and Google has already built a wind-powered data center.

At the most simple level, green computing is not a rocket science and certainly does not require large amounts of cash in case of up-front investment. As stated above, the active step for a green computing takes a little effort, yet low energy consumption usually changes to immediate savings.

Steps that we can take to contribute to green computing:

1) Power down when not in use seems simple but many of us powered up for a long time when not in use a large sum ofpower is being wasted, so if you're notusing the computer press the power button to shut it off until needed. This can be done even if thecomputer is working on something. Screensavers do not save power.Same goes for computers, you don't have to shut it down completelyif you don't want to reboot, just use sleep or hibernation mode. Thiswill help save energy and keep the system to its current state whenyou need it again.

2) Use the power saving features. All computers include power savingoptions. Usingthese features you can command the computer to dovarious energy-saving tasksautomatically, including shutting off un-used hard disks, powering off a monitor after a given time or even placing the computer into sleep mode when not in use. This is very useful on laptops to help preserve battery life.

3) Purchase energy saving hardware If you don't need super-fast com-puting power then look out for energy efficient components when buying a new computer, such as green hard drives and low-energy processors. While performance is slower they can use remarkably less power. Purchasing an energy saving power supply unit for a desktop PC can help the environment and save money, they're often quieter too.

4) Use a laptop instead of desktop Laptops are much better for the environment than desktop computers as they have components which require less power. If you don't need a desktop computer consider buying a laptop instead, or if you have both use the laptop as much as possible before considering the desktop.

5) Recycle responsibly Computer hardware is filled with different material which can be hazardous to the environment so make sure you dispose of old components effectively. Don't just throw broken technology in the bin, take the time to trace local recycling organizations. There should be companies which can remove the metals which may fix or

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