Assignment module 2 : Installation and Maintenance of Hardware and Its

Section 1: Multiple Choice

1. Which of the following precautions should be taken before working on computer hardware?

Ans- Wear an anti-static wrist strap to prevent damage from electrostatic discharge.

2. What is the purpose of thermal paste during CPU installation?

Ans- To improve thermal conductivity between the CPU and the heat sink.

3. Which tool is used to measure the output voltage of a power supply unit (PSU)?

Ans- Multimeter

4. Which component is responsible for storing BIOS settings, such as date and time, even when the computer is powered off?

Ans-CMOS battery (Complementary Metal-Oxide-Semiconductor)

Section 2: True or False

5. When installing a new hard drive, it is essential to format it before use.

Ans- True

6. A POST (Power-On Self-Test) error indicates a problem with the CPU.

Ans- True

7. It is safe to remove a USB flash drive from a computer without ejecting it first.

Ans- False

Section 3: Short Answer

8. Describe the steps involved in installing a new graphics card in a desktop computer.

Ans-

Step-1 : Firstly we have to check that the card is compatible with your computer's motherboard and model.

Step-2 : Then back-up your important data if any problem occur during the installation of graphics card your data will be safe.

Step-3 : Uninstall old graphics card drivers so when you install new drivers it easily install without an error.

Step-4 : Remove old graphics card and install new card.

Step-5 : Connect power cables and Restart your computer.

9. What is RAID, and what are some common RAID configurations?

Ans- RAID is Stands for "Redundant Array for Independent Disk". It is a type of storage that write data across multiple drivers within a system. Different configuration are expressed as numbers , such as RAID 0 , RAID 1 , RAID 5 etc.

Section 4: Practical Application

10. Demonstrate how to replace a CPU fan in a desktop computer.

Ans- Done.

Section 5: Essay

11. Discuss the importance of regular maintenance for computer hardware and provide examples of maintenance tasks.

Ans- Regular Maintenance of computer hardware is important because it keeps your computer running smoothly and efficiently . This improves computer performance , reduce downtime and protect your data.

Examples of Maintenance of computer tasks :

1. Cleaning : Dusting , cleaning the equipment and removing temporary files.
2. Updating : Update operating system , software , firmware and drivers.
3. Backing-up : backup your data files and network configuration.
4. Scanning : Running antivirus software and security scans to detect malware and virus.
5. Replace : Replacing wrong or old parts and upgrading components.
6. Troubleshooting : troubleshooting and repairing issues.
7. Monitoring : Monitoring and testing your computer's performance.

Regular maintenance of your computer hardware improved your computer's performance , Reduce downtime , Enhance your computer's security and protect your data. Computer maintenance of computer hardware is crucial for keeping your device running efficiently and extending its lifespan.