Assignment: Installation and Maintenance of Hardware and Its Components

Section 1: Multiple Choice

. desktop computeDescribe the steps involved in installing a new graphics card in a desktop compurture

computer hardware?

ans - b) Wear an anti-static wrist strap to prevent damage from electrostatic

discharge.

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

ans -d) To prevent the CPU from overheating.

3. Which tool is used to measure the output voltage of a power supply

unit (PSU)?

ans -a) Multimeter

4. Which component is responsible for storing BIOS settings, such as date

and time, even when the computer is powered off?

  ans - a) CMOS battery

Section 2: True or False

5. True or False: When installing a new hard drive, it is essential to format

it before use.

Ans -false

6. True or False: A POST (Power-On Self-Test) error indicates a problem

with the CPU.

Ans –false

7. True or False: It is safe to remove a USB flash drive from a computer

without ejecting it first.

Ans –true

Section 3: Short Answer

8. desktop computeDescribe the steps involved in installing a new graphics card in a desktop computure.

ans-
1]   Make sure your PC and power supply can support the new graphics card.
2] Switch off your PC, and remove your old graphics card.
3] Physically install the new graphics card.
4] Switch your PC back on and install the new graphics card drivers.
5] Connect any required PSU cables.

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

ans -RAID stands for Redundant Array of Independent Disks. Simply put, it's the process of using multiple hard drives to make a redundant copy of data. Should a drive in a RAID array fail, the data remains secure through a variety of mechanisms. RAID technology spreads your files over several drives in your workstation or servers to protect your valuable data in the event of a drive failure. How the data is protected varies based on the configured RAID level.

Section 4: Practical Application

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

ans -   Before you can start replacing your CPU fan, you need to buy a replacement unit. The two major processor brands are AMD and Intel.

  1]   Power off your computer and unplug it from any power source. Clear an area on a table or the floor and place the computer on its side. This provides a better working angle and prevents you from possibly bumping and damaging the graphics card.

2] Remove the side panel. Make sure your hands are clean and use an anti-static wrist strap so you are grounded and will not damage any functioning components.

3] There are 4 types of screws on the side of the CPU fan, you have to unlock them properly and then remove the CPU fan and then put the new CPU fan back

Section 5: Essay
11. Discuss the importance of regular maintenance for computer hardware
and provide examples of maintenance task

ans - Cleaning Hardware Components: Dust and dirt can accumulate within your computer's hardware components over time, leading to overheating and potentially damaging sensitive parts. Regularly cleaning these components, such as the keyboard and internal fans, can help prevent these issues.

Updating Software and Drivers: Keeping your software up-to-date is crucial for the overall performance

and security of your computer. This includes updating your operating system, applications, and drivers, which help your hardware components interact with your system

Running System Diagnostic Tests: These tests can identify potential issues with your computer's hardware or software before they become serious problems. Regular diagnostics can help ensure your system is running smoothly and efficiently.

Managing Storage and Deleting Unnecessar…