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**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? a) Ensure the computer is plugged in to prevent electrostatic discharge.

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

c) Work on carpeted surfaces to prevent slipping.

d) Use magnetic tools to handle components more easily.

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?

a) To insulate the CPU from heat.

b) To provide mechanical support for the CPU.

c) To improve thermal conductivity between the CPU and the heat sink.

d) To prevent the CPU from overheating.

Ans:- c) 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)?

a) Multimeter b) Screwdriver c) Pliers d) Hex key

Ans:-a)Multimeter

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

a) CMOS battery b) CPU c) RAM d) Hard drive

Ans:-CMOS battery

Section:2 True or False

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

Ans:-True , so that OS should recognize it and store data properly.

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

Ans:-False , not always it also checks the hardware components that they are working correctly.

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

Ans:-False, because it cause data corruption, file loss and damage to file system.

Section:3 Short Answer

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

Ans:-1. Power Off and Unplug the Computer.

2. Open the Computer Case side panel with screwdriver.

3. Wear an anti-static wrist strap to discharge electricity.

4. Identify and PCIe slot.

5. Insert the New Graphics Card slightly press down until the card fix into its place.

6. High-end GPUs require additional 6-pin or 8-pin PCIe.

7. Close the side panel and screw it back.

8. Power On and Install Drivers from manufacture’s website.

9. Verify Installation.

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

Ans:-

Section:-4 Practical Application

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

Ans:-

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

Ans:-

1)Improved Performance:-

.It keeps hardware clean and reduce lags.

2)Increase Lifespan:-

.Increase the time period of fans, motherboard.

3)Provides Security:-

**.**It enables more security and updates to prevent from bugs.

Other points are:-

.Backup data regularly.

.Running antivirus.

.Replacing thermal paste.