

## module-2

### Assignment: Installation and Maintenance of Hardware and Its Components

#### 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.

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.

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

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

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:false

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

Ans:false

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

Ans: Power off, open case, insert card, secure, connect power.

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

Redundant Array of Independent Disks.

RAID 0: Striping. RAID 1: Mirroring. RAID 5: Parity.

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

Power off, remove old fan, clean CPU, apply thermal paste, attach new fan, connect power.

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

Prevents failures, prolongs life.

Cleaning dust, checking cables, updating software.