

# Assignment:

## Module -1: Understanding of Hardware and Its Components

### Section 1: Multiple Choice

1. Which of the following is NOT a component of the CPU?
  1. ALU
  2. RAM
  3. CU
  4. 1 and 3 both
2. What is the function of RAM in a computer?
3. Which of the following is a primary storage device?
  1. HDD
  2. SSD
  3. SD card
  4. 1 and 2 both
4. What is the purpose of a GPU?

### Section 2: True or False

5. True or False: The motherboard is the main circuit board of a computer where other components are attached.
6. True or False: A UPS (Uninterruptible Power Supply) is a hardware device that provides emergency power to a load when the input power source fails.
7. True or False: An expansion card is a circuit board that enhances the functionality of a component.

### Section 3: Short Answer

8. Explain the difference between HDD and SSD.
9. Describe the function of BIOS in a computer system.
10. List and briefly explain three input devices commonly used with computers.

### Section 4: Practical Application

11. Identify and label the following components on a diagram of a motherboard:
  - CPU
  - RAM slots
  - SATA connectors

- PCI-E slot
12. Demonstrate how to install a RAM module into a computer.

#### Section 5: Essay

13. Discuss the importance of proper cooling mechanisms in a computer system. Include examples of cooling methods and their effectiveness.
14. Explain the concept of bus width and its significance in computer architecture.

### Assignment module 2 : Installation and Maintenance of Hardware and Its

#### Section 1: Multiple Choice

- Which of the following precautions should be taken before working on computer hardware?
  - Ensure the computer is plugged in to prevent electrostatic discharge.
  - Wear an anti-static wrist strap to prevent damage from electrostatic discharge.
  - Work on carpeted surfaces to prevent slipping.
  - Use magnetic tools to handle components more easily.
- What is the purpose of thermal paste during CPU installation?
  - To insulate the CPU from heat.
  - To provide mechanical support for the CPU.
  - To improve thermal conductivity between the CPU and the heat sink.
  - To prevent the CPU from overheating.
- Which tool is used to measure the output voltage of a power supply unit (PSU)?
  - Multimeter
  - Screwdriver
  - Pliers
  - Hex key
- Which component is responsible for storing BIOS settings, such as date and time, even when the computer is powered off?
  - CMOS battery
  - CPU
  - RAM
  - Hard drive