

## ( MODULE ) 1 : Understanding of Hardware and Its Components )

### SECTION 1 MULTIPLE CHOISE

1. Which of the following is NOT a component of the CPU?  
:- RAM
2. What is the function of RAM in a computer?  
:- ROMA
3. Which of the following is a primary storage device?  
:- Both 1 & 2
4. What is the purpose of a GPU?  
:- The purpose of a GPU is to make graphics and videos run smoothly.

### SECTION 2 TRUE & FALSE

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

### SECTION 3 SHORT ANSWER

8. Explain the difference between HDD and SSD.  
:- **HDD(Hard Disk Drive)** Stores data on spinning magnetic disks, slower but cheaper with more storage space.  
**SDD(Solid State Drive)** Stores data on flash memory chips, much faster, more durable, but usually more expensive.
9. Describe the function of BIOS in a computer system  
:- The function of BIOS is to start the computer, check hardware, and load the operating system.

10. List and briefly explain three input devices commonly used with computers.

**Keyboard** – Used to type text and commands.

**Mouse** – Used to point, click, and select.

**Scanner** – Used to convert paper documents into digital form.

## ( 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?

:- (B) Wear an anti-static wrist strap to prevent damage from electrostatic discharge.

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

:- (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

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

:- (A) CMOS battery

### SECTION 2 TRUE AND FALSE

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

:- True

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

:- False

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

:- False

### **SECTION 3 SHORT ANSWER**

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

**:- Power Off and Unplug**

**Open the Case**

**Remove Old Graphics Card**

**Prepare the Slot**

**Insert the New Graphics Card**

**Secure the Card**

**Connect Power Cables**

**Close the Case**

**Power On and Install Drivers**

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

**:- RAID 0 (Striping) – Fast performance, no data backup.**

**RAID 1 (Mirroring) – Data is duplicated for safety.**

**RAID 5 (Striping with Parity) – Balanced performance and fault tolerance.**

**RAID 10 (1+0) – Combines speed and redundancy.**

### **SECTION 5 ESSAY**

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

**1 Cleaning Dust** – Removing dust from fans, vents, and components to prevent overheating.

**2 Checking Connections** – Ensuring cables and components are securely connected.

**3 Updating BIOS/Firmware** – Keeps hardware compatible and improves stability.

**4 Monitoring Temperatures** – Using software or sensors to prevent overheating.

**5 Replacing Worn Components** – Such as fans, thermal paste, or batteries (CMOS).