

(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).