

### **Section 1: Multiple Choice**

1. Which of the following is NOT a component of the CPU?

**✓ RAM (Correct Answer: 2)**

2. What is the function of RAM?

RAM temporarily stores data and instructions needed by the CPU for fast access.

3. Which of the following is a primary storage device?

**✓ SD card (Correct answer: 3)**

(Primary storage = memory, secondary storage = HDD/SSD)

4. What is the purpose of a GPU?

A GPU processes graphics-related tasks such as images, videos, and gaming.

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### **Section 2: True or False**

5. The motherboard is the main circuit board of a computer.

**✓ True**

6. A UPS provides emergency power when electricity fails.

**✓ True**

7. An expansion card is a circuit board that enhances functionality.

**✓ True**

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### **Section 3: Short Answer**

8. Difference between HDD and SSD (short):

- **HDD: Mechanical disk, slower, cheaper, more storage.**
- **SSD: Flash storage, much faster, no moving parts, more expensive.**

9. Function of BIOS:

BIOS initializes hardware during boot and loads the operating system.

10. Three input devices:

- **Keyboard – for typing.**
  - **Mouse – for pointing and clicking.**
  - **Scanner – for converting physical documents to digital format.**
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### **Section 4: Practical Application**

## **11. Components on a motherboard (labels):**

- CPU – Central slot under the CPU socket.
- RAM slots – Long vertical slots beside CPU.
- SATA connectors – Small L-shaped ports for HDD/SSD.
- PCI-E slot – Long expansion slot for GPU.

*(If you want, I can create a labeled diagram.)*

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## **12. How to install RAM (short):**

1. Power off PC and unplug.
  2. Open side panel.
  3. Align RAM notch with slot.
  4. Insert and press firmly until clips lock.
  5. Close panel and restart PC.
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## **13. Importance of cooling (short):**

Cooling prevents overheating, improves performance, and increases lifespan.

### **Methods:**

- Air cooling: Fans, heat sinks (affordable, good for most systems).
  - Liquid cooling: Uses coolant for better heat transfer (high performance).
  - Thermal paste: Improves CPU heat conduction.
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## **14. Bus width concept:**

**Bus width is the number of bits a computer can transmit at once.**

**Significance:**

**Wider bus = more data transferred per cycle = faster performance**