

module -1

Assignment:

Understanding of Hardware and Its Components

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?

Ans: Temporary data storage for quick access.

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?

Ans: Processing graphics and visual data.

5. The motherboard is the main circuit board of a computer where other components are attached.

Ans: true

6. A UPS (Uninterruptible Power Supply) is a hardware device that provides emergency power to a load when the input power source fails.

Ans: true

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

Ans: true

8. Explain the difference between HDD and SSD.

Ans: HDD: Magnetic storage, slower. SSD: Flash storage, faster.

9. Describe the function of BIOS in a computer system.

Ans: Boots system, manages hardware.

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

Ans: Keyboard: Typing input.

Mouse: Pointer control.

Scanner: Digitizes documents.

11. Identify and label the following components on a diagram of a motherboard:

CPU

RAM slots

SATA connectors

PCI-E slot

Ans: CPU, RAM slots, SATA connectors, PCI-E slot.

12. Demonstrate how to install a RAM module into a computer.

Ans: Align RAM with slot, press firmly.

13. Discuss the importance of proper cooling mechanisms in a computer system. Include examples of cooling methods and their effectiveness.

Ans: Prevents overheating, extends lifespan.

Fans: Common, effective.

Liquid cooling: Better for high performance.

14. Explain the concept of bus width and its significance in computer architecture.

ANS: Data pathway size, affects speed.