Module -1: Understanding of Hardware and Its Components

Section 1: Multiple Choice

1. Which of the following is NOT a component of the CPU?
Ans:- ALU and CU

2. What is the function of RAM in a computer?
Ans:- RAM (Random Access Memory) which is contain memory temporary wich is easy to use by prosser

3. Which of the following is a primary storage device?
Ans:- SSD OR HDD

4. What is the purpose of a GPU?
Ans:- A GPU (Graphics Processing Unit) is designed to handle complex graphical computations efficiently.

Section 2: True or False

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

Section 3: Short Answer

8. Explain the difference between HDD and SSD.
Ans:-

Hdd	SSD
:- Data is stored on magnetic platters.	:- Data stored in flash memory.
:- Slower then ssd with slow data transfer speed.	:- Faster than hdd with fast data transfer speed.
:- Consume more power compared to SSD.	:- Consume less power compared to HDD.
:- Lower cost per gigabyte compared to SSD.	:- More expensive per gigabyte comared to HDD.

9. Describe the function of BIOS in a computer system

Ans:-BIOS(Basic input/output System) initializing hardware components and loading the operating systemupon startup.

10. List and vriefly explain three input devices commonly used with computers.
Ans:- Keyboard -- keyboard is primiry input device witch is use to type somthing desktop or any file.

Mouse -- A mouse is a pointing device used to control the cursor on the screen and select items, files, and icons.

Microphon -- A microphon is an audio input device.

Section 4: Practical Application

11. Identify and label the following components on a diagram of a motherboard:
Ans:-
- CPU :-(Central Processing Unit) located in center of the motherboard.
- RAM Slot :-(Random Access Memmory) located in top right in motherboard.
- SATA CONNECTIONS :-(Serial Advanced Technology Attachments) located in bottem right.
- PCI-E slot :-(Peripheral Component Interconnect Express) located in left side near cpu socket.

12. Demonstrate how to install a RAM module into a computer.
Ans:- 10 easy stape to install a ram in computers.

step-1: Prepare your space and gather supplies.
step-2: Shut down your desktop computer.
step-3: Unpluge the power cable.
step-4: Holde the power button for 5 seconds.
step-5: Open the case.
step-6: Ground yourself!
step-7: Remove existing mrmory modules.
step-8: Install new RAM.
step-9: Close the comouter case.
step-10: Plug in the power cable.

Section 5: Essay

13. Discuss the importance of proper cooling mechanisms in a computer system. Include examples of cooling methods and their effectiveness.
Ans:- We use proper colling mechanisms in a computer sysetm because computer generate heat wich is impact our performance and also damage hardware.

Types of cooling systems in your PC

1)Air cooling(Fans):- costly and widely used
2)Liquid cooling:- more effective used for gaming pc
3)Heat sinks:- Commonly used with older CPUs

use to improve performance and safe hardware also.

14. Explain the concept of bus width and its significance in computer architecture.
Ans:- Bus width refers to the numbers of bits that can be transmitted simultaneously between different components within a computer system, such as the CPU, memory, and peripheral devices. It plays a crucial role in determing the overall speed and efficiency of data processing.