Assignment:

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 :- RAM(Random access memory)

1. What is the function of RAM in a computer?

Ans :- The Hardware in a computing device that is provides all the temporary storage for the operating system.

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

Ans :- HDD and SSD

1. What is the purpose of a GPU?

Ans :- The graphics processing unit(GPU) device helps handle graphics-related work like graphics, effect, and videos.

Section 2 :- True or False

1. True or False: The motherboard is the main circuit board of a computer where other components are attached.

Ans :- True

1. True or False: A UPS(Uninterruptible Power Supply) is a hardware device that provides emergency power to a load when the input power source fails.

Ans :- True

1. True or False: An expansion card is a circuit board that enhances the functionally of a component.

Ans :- True

Section 3:- Short Answer

1. Explain the difference between HDD and SSD.

Ans :-

|  |  |
| --- | --- |
| HDD | SSD |
| 1. HDD stands for Hard Disk Drive. | 1. SSD stands for Solid State Drive. |
| 1. HDD contains moving mechanical parts. | 1. SSD does not contains, mechanical parts, only electronical parts. |
| 1. HDD is heavier in weight. | 1. SSD is lighter in weight. |
| 1. HDD is larger in size. | 1. SSD is more compact in size. |
| 1. HDD is cheaper per unit storage. | 1. SSD is costlier per unit storage. |

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

Ans :- There are some function of BIOS in a computer are as follow:-

1. POST :- Power on self-test is the process that perform the BIOS it checks the hardware components to ensure they're functioning correctly.
2. Boot loader :- It locates and loads the operating system into the computer's memory.
3. CMOS Setup :- Complementary Metal-Oxide Semiconductor(CMOS), we can setting in date, time, Drive Configuration, Memory, CPU settings, Integrated ports, Boot sequence, Power management.
4. List and briefly explain three input devices commonly used with computers.

Ans :- There are some three input devices are us follow:-

1. Keyboard
2. Mouse
3. Printer
4. Keyboard :- Keyboard is a major input device used with the computers and other electronic devices and takes input from user in the form of text, numbers, and several type command.
5. Mouse :- The mouse is the most used pointing device and clicking and dragging, the mouse moves a little cursor across the screen.
6. Printer :- An printer is a device that is accepting text and graphics output from the computer, and it is transferring this information to paper, sheets.

Section 5: Essay

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

Ans :- a. Preventing Overheating

b. Maintaining Performance

c. Extending Lifespan

d. Ensuring Stability

. There are some examples of cooling methods and their effectiveness:-

1. Air cooling

. Effectiveness :-

1. Efficient for moderate heat loads.
2. Easy to install and maintain a PC.

. Examples :- Case fans that improve the airflow within at the computer case.

1. Liquid Cooling

. Effectiveness :-

1. More effective than air cooling.
2. Provides better thermal management.

. Example :- Custom loop cooling systems designed for advanced users.

1. Phase Change Cooling

. Effectiveness :-

1. Extremely effective and capable of achieving very low temperatures.
2. Ideal for extreme overclocking.

. Example :- System similar to a refrigerator or air conditioner applied to the PC components.

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

Ans :-