Assignment - 1

Understanding of Hardware and Its Components

Section 1: Multiple Choice

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

ANS : 1 & 3 BOTH

2. **What is the function of RAM in a computer?**

ANS : ram is temporary memory and ram stores data needs to retrieve quickly .

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

ANS : SD CARD.

4. **What is the purpose of a GPU?**

ANS : FOR HIGH DEMANDS OF GRAPHICS & GAMING.

Section 2: True or False

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

ANS : TRUE.

6. **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.

7. **True or False: 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 :

SR. NO.	SSD	HDD
1	Full form of SSD is Solid state drive	Full form of HDD is Hard disk drive
2	SSD is faster then HDD	HDD is slower then SSD
3	Store data in magnetic disk	Store data in flash memory

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

ANS : Check all the configuration and drives working or not. If any problem beeper sound in beep.

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

ANS : I) MOUSE

ii) MONITOR

iii) KEYBOARD

Section 4: Practical Application

11. Identify and label the following components on a diagramof a motherboard.

1. CPU

2. RAM slots

3. SATA connectors

4. PCI-E slot

ANS : Done in lab.

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

ANS : Done in lab.

Section 5: Essay

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

ANS : If all components are dispersing heat into a small area, such as the inside of a pc case, the temperature quickly rice. cooling mechanisms is used to keep computer components cool .

Ex : Sometimes we use high graphics games and do some high work therefore our pc and laptop heat so our system hangs and lags.

So if we use high graphics games and work so we need a proper cooling system like high graphics card and cooling gel for cpu.

 " So that's the discussion on "importance of proper cooling mechanism in a computer system."

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

ANS :
- In the backside of the motherboard we see some thin and thick lines are called buses in computer architecture.
- There are three types of buses.
  1. Control:- control all the buses working or not.
  2. Data:- components transfer any data by buses
  3. Address:- where the data came from and where it will go is all done through buses .
- All components connected by buses.