**✅ Ready? Here's Question 1 of 20:**

**1. What is the primary function of the CPU in a computer system?**

A) To store data permanently  
B) To supply power to the computer  
C) To execute instructions and process data  
D) To display images on the monitor

*Please type A, B, C, or D to answer.*

**You said:**

c

**ChatGPT said:**

✅ **Correct!**  
The CPU (Central Processing Unit) **executes instructions and processes data** — it’s the brain of the computer.

**Question 2 of 20:**

**2. Which of the following is a type of volatile memory?**

A) SSD  
B) HDD  
C) RAM  
D) ROM

*Your answer? (A, B, C, or D)*

**You said:**

c

**ChatGPT said:**

✅ **Correct!**  
**RAM (Random Access Memory)** is volatile memory — it loses its contents when the computer is powered off.

**Question 3 of 20:**

**3. What component connects and allows communication between all other computer hardware parts?**

A) Power Supply Unit  
B) GPU  
C) Motherboard  
D) Hard Drive

*Your answer? (A, B, C, or D)*

**You said:**

c

**ChatGPT said:**

✅ **Correct!**  
The **motherboard** is the main circuit board that connects the CPU, RAM, storage, and all peripherals.

**Question 4 of 20:**

**4. What is the function of the ALU within the CPU?**

A) Controls input and output devices  
B) Performs arithmetic and logical operations  
C) Stores frequently used instructions  
D) Manages network communication

*Your answer? (A, B, C, or D)*

**You said:**

b

**ChatGPT said:**

✅ **Correct!**  
The **ALU (Arithmetic Logic Unit)** handles **arithmetic and logical operations** inside the CPU.

**Question 5 of 20:**

**5. Which component is responsible for displaying visual output from the computer?**

A) RAM  
B) GPU  
C) CPU  
D) PSU

*Your answer? (A, B, C, or D)*

**You said:**

b

**ChatGPT said:**

✅ **Correct!**  
The **GPU (Graphics Processing Unit)** is responsible for **rendering visual output** to your display.

**Question 6 of 20:**

**6. What type of storage device has no moving parts and is faster than traditional hard drives?**

A) HDD  
B) SSD  
C) DVD  
D) Floppy Disk

*Your answer? (A, B, C, or D)*

**You said:**

ssd

**ChatGPT said:**

✅ **Correct!**  
**SSD (Solid State Drive)** has **no moving parts** and is much **faster** than traditional HDDs.

**Question 7 of 20:**

**7. What does BIOS/UEFI primarily do during the computer boot process?**

A) Displays the operating system’s GUI  
B) Performs initial hardware checks and loads the OS  
C) Manages software installation  
D) Encrypts hard drive data

*Your answer? (A, B, C, or D)*

**You said:**

b i see a pattern all the answers have so far been b or c mix it up make it a random answer stop reapeating the pattern

**ChatGPT said:**

🔁 Noted! I’ll make sure the correct answers follow a **random pattern** from here on out — no predictable sequences. Thanks for pointing that out!

✅ **Correct!**  
The **BIOS/UEFI** performs **hardware checks** and loads the operating system during the boot process.

**Question 8 of 20:**

**8. Which of the following is NOT an input device?**

A) Keyboard  
B) Mouse  
C) Monitor  
D) Microphone

*Your answer? (A, B, C, or D)*

**You said:**

d

**ChatGPT said:**

❌ **Incorrect.**  
The correct answer is **C) Monitor**.  
A **monitor** is an **output device** — it displays data, whereas the keyboard, mouse, and microphone are **input devices**.

**Question 9 of 20:**

**9. Which of the following is a type of non-volatile memory?**

A) RAM  
B) SSD  
C) Cache  
D) Registers

*Your answer? (A, B, C, or D)*

**You said:**

b

**ChatGPT said:**

✅ **Correct!**  
**SSD (Solid State Drive)** is **non-volatile memory**, meaning it retains data even when the power is turned off, unlike **RAM**, which is volatile.

**Question 10 of 20:**

**10. What is the purpose of the cooling system in a computer?**

A) To speed up data processing  
B) To store data safely  
C) To prevent overheating of components  
D) To enhance graphics rendering

*Your answer? (A, B, C, or D)*

**You said:**

c

**ChatGPT said:**

✅ **Correct!**  
The cooling system’s main job is to **prevent overheating** of critical components like the CPU and GPU, ensuring stable performance.

**Question 11 of 20:**

**11. Which type of memory is closest to the CPU and is the fastest?**

A) RAM  
B) Cache  
C) SSD  
D) HDD

*Your answer? (A, B, C, or D)*

**You said:**

b

**ChatGPT said:**

✅ **Correct!**  
**Cache memory** is the **fastest** type of memory and is located closest to the CPU, allowing for quicker access to frequently used data.

**Question 12 of 20:**

**12. Which of the following components is essential for handling network communications in a computer system?**

A) Network Interface Card (NIC)  
B) GPU  
C) Power Supply Unit (PSU)  
D) RAM

*Your answer? (A, B, C, or D)*

**You said:**

a

**ChatGPT said:**

✅ **Correct!**  
The **Network Interface Card (NIC)** is responsible for handling **network communications** in a computer system.

**Question 13 of 20:**

**13. What does the term "multithreading" refer to in CPU design?**

A) The ability of a CPU to execute multiple tasks at the same time  
B) The storage of multiple data sets  
C) The use of multiple types of memory  
D) The process of overclocking a CPU

*Your answer? (A, B, C, or D)*

**You said:**

a

**ChatGPT said:**

✅ **Correct!**  
**Multithreading** refers to the ability of a CPU to execute **multiple tasks at the same time**, improving efficiency, especially in parallel processing.

**Question 14 of 20:**

**14. Which of the following is a function of the PSU (Power Supply Unit)?**

A) To store data  
B) To convert AC power to DC power  
C) To increase the CPU speed  
D) To display images on the screen

*Your answer? (A, B, C, or D)*

**You said:**

c

**ChatGPT said:**

❌ **Incorrect.**  
The correct answer is **B) To convert AC power to DC power**.  
The **Power Supply Unit (PSU)** converts **AC (alternating current)** from the wall outlet into **DC (direct current)** used by the computer’s components.

**Question 15 of 20:**

**15. What is the main role of the control unit (CU) within the CPU?**

A) Perform calculations  
B) Store instructions  
C) Direct and manage CPU operations  
D) Handle input/output devices

*Your answer? (A, B, C, or D)*

**You said:**

c

**ChatGPT said:**

✅ **Correct!**  
The **Control Unit (CU)** **directs and manages** the operations of the CPU, ensuring that instructions are executed in the correct sequence.

**Question 16 of 20:**

**16. Which of the following is NOT a common feature of SSDs?**

A) Faster read/write speeds compared to HDDs  
B) No moving parts  
C) More affordable than HDDs  
D) Better shock resistance

*Your answer? (A, B, C, or D)*

**You said:**

d

**ChatGPT said:**

❌ **Incorrect.**  
The correct answer is **C) More affordable than HDDs**.  
While SSDs are **faster and more durable**, they are typically **more expensive** than traditional **HDDs**.

**Question 17 of 20:**

**17. What is the primary function of the ALU (Arithmetic Logic Unit) in the CPU?**

A) To store data temporarily  
B) To handle input/output processes  
C) To perform arithmetic and logical operations  
D) To manage network connectivity

*Your answer? (A, B, C, or D)*

**You said:**

c

**ChatGPT said:**

✅ **Correct!**  
The **ALU (Arithmetic Logic Unit)** is responsible for performing **arithmetic and logical operations** inside the CPU.

**Question 18 of 20:**

**18. What does the term “bit manipulation” commonly refer to in low-level programming?**

A) Increasing memory usage to enhance performance  
B) Changing data at the individual bit level for efficiency or encryption  
C) Managing hardware interrupts  
D) Displaying graphical elements on the screen

*Your answer? (A, B, C, or D)*

**You said:**

b

**ChatGPT said:**

**You said:**

b

**ChatGPT said:**

✅ **Correct!**  
**Bit manipulation** involves changing data at the **individual bit level**, which is crucial for tasks like **optimizing performance** or **encrypting data** in low-level programming.

**Question 19 of 20:**

**19. Which of the following describes a key characteristic of volatile memory?**

A) It retains data even when the power is off  
B) It is faster than non-volatile memory  
C) It is used for long-term storage of data  
D) It loses data when power is lost

*Your answer? (A, B, C, or D)*

**You said:**

d

**ChatGPT said:**

✅ **Correct!**  
**Volatile memory** loses its data when the power is turned off — this includes **RAM**, which only holds data temporarily while the system is running.

**Question 20 of 20:**

**20. Which of the following is an essential function of the GPU (Graphics Processing Unit)?**

A) Handling network communication  
B) Storing data in a permanent storage location  
C) Rendering images and video  
D) Managing hardware interrupts

*Your answer? (A, B, C, or D)*

**You said:**

c

**ChatGPT said:**

✅ **Correct!**  
The **GPU (Graphics Processing Unit)** is responsible for **rendering images and video**, especially in tasks like gaming, video playback, and graphical computations.

**🎉 Test Complete!**

Now, let's calculate your total score:

You got **17 out of 20** correct!

**Score:** 85%