# Computer Hardware Basics

Choose one answer per question. Circle A, B, C, or D.

1. Which of these is an example of hardware?
   A. A removable graphics card
   B. A photo-editing application
   C. A downloaded font file
   D. An operating-system update

2. Which desktop component is the general-purpose processor that executes program instructions?
   A. Case fan
   B. Power supply
   C. CPU
   D. Display cable

3. Which component provides the main circuit board with sockets and connectors for the CPU, memory, and expansion cards?
   A. Monitor
   B. Motherboard
   C. Keyboard
   D. Power supply

4. Which component sends the computer input when a person types a letter?
   A. Printer
   B. Monitor
   C. Speaker
   D. Keyboard

5. Which desktop component supplies electrical power to the motherboard and other internal parts?
   A. Solid-state drive
   B. Power supply unit
   C. Graphics processor
   D. Memory module

6. While editing a large image, which component typically holds the data the CPU is actively using?

A. RAM
B. A disconnected external hard drive
C. The screen
D. The power supply

7. Which storage device normally uses flash memory and contains no spinning platters?

A. A floppy disk drive
B. A mechanical hard disk drive
C. A DVD drive
D. A solid-state drive

8. Which component is specifically designed to perform many graphics calculations in parallel?

A. Keyboard controller
B. Power supply unit
C. GPU
D. Hard disk drive

9. A desktop is running and its monitor is powered on. Someone pulls out the only cable carrying the desktop’s video signal to the monitor. What is the direct effect?

A. The monitor stops receiving the desktop’s picture
B. Files on the storage drive are erased
C. The desktop loses power to its motherboard
D. The keyboard stops sending input to the desktop

10. Why is a heat sink fitted against a desktop processor?

A. To increase the capacity of installed RAM
B. To store settings after shutdown
C. To connect the display cable directly to the CPU
D. To move heat away and give it more surface area to dissipate

11. A file was fully saved to an SSD, and another edit exists only in RAM. The machine suddenly loses power. What should remain when it restarts, assuming the hardware is undamaged?

A. Both versions are guaranteed to remain
B. Only the edit held in RAM
C. The version saved to the SSD
D. Neither version can remain without electrical power

12. During a workload the processor often waits while the system moves data between RAM and its drive because memory is full. Which upgrade most directly addresses that problem?

A. A higher-resolution display
B. More compatible RAM
C. An additional cooling fan
D. A keyboard with more keys

13. Two memory modules both hold 16 GB, but their connector and electrical standards differ. What is the right way to decide whether either fits a motherboard?

A. Check only whether the monitor is connected
B. Choose either module because the capacities match
C. Check only how much space the SSD has
D. Check the memory type and specifications supported by the board

14. The same 12 GB file is read from two drives. One sustains 0.30 GB/s and the other 3.0 GB/s. Ignoring overhead, how long do those reads take, respectively?

A. 40 seconds and 4 seconds
B. 4 seconds and 40 seconds
C. 36 seconds and 3.6 seconds
D. 12 seconds and 12 seconds

15. A dedicated graphics card has 4 GB of its own memory. Which upgrade directly increases the amount of memory physically on the graphics card?

A. Add another system SSD
B. Replace the CPU without changing the graphics card
C. Install a compatible graphics card with more onboard graphics memory
D. Install a second keyboard