

Foundational Computer Science Concepts

Computer Science · Answer Key · 8 Questions

1. What is the fundamental unit of information in computing, represented as either a 0 or a 1?

- A) Byte
- B) Bit**
- C) Kilobyte
- D) Megahertz

2. Which component is often referred to as the 'brain' of the computer, responsible for executing instructions and performing calculations?

- A) Hard Drive
- B) RAM
- C) Central Processing Unit (CPU)**
- D) Graphics Card

3. The binary number system, fundamental to how computers store and process data, uses how many distinct digits?

- A) Ten (0-9)
- B) Two (0 and 1)**
- C) Sixteen (0-9, A-F)
- D) Eight (0-7)

4. What is a finite sequence of well-defined, computer-implementable instructions, typically used to solve a class of specific problems or to perform a computation?

- A) Hardware
- B) Algorithm**
- C) Operating System
- D) Network

5. What type of computer memory is used for temporary storage of data that the CPU is actively accessing and is typically volatile (loses data when power is off)?

- A) Read-Only Memory (ROM)
- B) Hard Disk Drive (HDD)
- C) Random Access Memory (RAM)**
- D) Solid State Drive (SSD)

6. Which software manages computer hardware and software resources and provides common services for computer programs?

- A) Web Browser
- B) Word Processor
- C) Operating System**
- D) Spreadsheet Application

7. Which of the following is primarily considered an input device for a computer?

- A) Monitor
- B) Printer
- C) Keyboard**
- D) Speakers

8. What is the primary role of a computer programmer in relation to software?

- A) Design computer hardware components
- B) Write, test, and maintain software code**
- C) Repair computer networks
- D) Manufacture integrated circuits