

Introduction to Computer Systems

Computer Science · Answer Key · 23 Questions

1. What is a computer?

A) An electronic device that stores, processes, and retrieves data according to instructions.

- B) A physical device that only processes data.
- C) A program that runs on a machine.
- D) A network of interconnected devices.

2. Who is credited with designing the Analytical Engine in the 1830s?

A) Charles Babbage

- B) Bill Gates
- C) Steve Jobs
- D) John Mauchly

3. What does CLO1 refer to in the lecture overview?

A) Course Learning Outcome 1

- B) Computer Logic Operation 1
- C) Centralized Learning Objective 1
- D) Component Level Optimization 1

4. A computer system is a set of interconnected components that work together to process, store, and manage data. This involves both physical devices (hardware) and programs (software). What is this definition referring to?

A) A computer system

- B) An algorithm
- C) A network
- D) An operating system

5. Which component of a computer system is responsible for executing instructions and performing calculations?

A) Central Processing Unit (CPU)

- B) Random Access Memory (RAM)
- C) Hard Disk Drive (HDD)
- D) Input Device

6. What does ALU stand for within the CPU?

A) Arithmetic Logic Unit

- B) Advanced Logic Utility
- C) Automated Learning Unit
- D) Accessory Logic Unit

7. Which unit within the CPU directs operations by interpreting and executing instructions from memory?

A) Control Unit (CU)

- B) Arithmetic Logic Unit (ALU)
- C) Random Access Memory (RAM)
- D) Storage Unit

8. What is RAM (Random Access Memory)?

A) Primary memory that is volatile and temporarily stores data.

- B) Secondary storage that is non-volatile and used for long-term storage.
- C) A device for inputting data.
- D) A device for outputting data.

9. Which type of memory is non-volatile, meaning data persists after power is turned off?

A) Secondary Memory (Hard Drive/SSD)

- B) Primary Memory (RAM)
- C) Cache Memory
- D) Read-Only Memory (ROM)

10. Which of the following is an example of an input device?

A) Keyboard

- B) Monitor
- C) Printer
- D) Speaker

11. Which of the following is an example of an output device?

A) Monitor

- B) Mouse
- C) Microphone
- D) Scanner

12. What are programs designed to perform specific tasks called?

A) Application Software

- B) System Software
- C) Operating System
- D) Firmware

13. Which type of software controls hardware and provides a platform for running other software?

- A) System Software (e.g., Windows OS)**
- B) Application Software (e.g., Word Processor)
- C) Utility Software
- D) Malware

14. What is an example of Personal Computer (PC) type?

- A) Desktop**
- B) Server
- C) Embedded System
- D) Supercomputer

15. Which type of computer system is used to manage network resources and is typically powerful?

- A) Servers**
- B) Mainframes
- C) Quantum Computers
- D) Personal Computers

16. What are specialized computers designed for specific tasks, like those found in washing machines or smart devices, called?

- A) Embedded Systems**
- B) Supercomputers
- C) Mainframes
- D) Personal Computers

17. Which type of computer system is extremely powerful and used for complex computations like weather forecasting?

- A) Supercomputers**
- B) Mainframes
- C) Servers
- D) Personal Computers

18. What is the basic operation of a computer system in order?

- A) Input, Processing, Storage, Output**
- B) Processing, Input, Output, Storage
- C) Storage, Input, Processing, Output
- D) Output, Storage, Input, Processing

19. Software acts as an intermediary between the user and the hardware. What else does it do?

A) Provides functionality

- B) Controls the power supply
- C) Manufactures hardware
- D) Stores data permanently

20. In the Von Neumann Architecture, what is shared between data and instructions?

A) Single memory

- B) Multiple processors
- C) Separate memory spaces
- D) Input devices

21. What is a characteristic of the Harvard Architecture?

A) Separate memory for data and instructions

- B) Single memory for data and instructions
- C) Parallel processing
- D) Cloud storage

22. Which type of storage includes optical disks and tape drives?

A) Tertiary Storage

- B) Primary Storage
- C) Secondary Storage
- D) Cloud Storage

23. What is Cloud Storage?

A) Online storage platforms

- B) Physical storage devices
- C) Temporary memory
- D) Processing units