Time left 0:26:17

Question 1

Not yet answered

Marked out of 1.00

In binary subtraction, what is the result of 110 - 101?

- a. 1
- b. 10
- c. 11
- d. 100

Clear my choice

Question 2

Not yet answered

Marked out of 1.00

Which component of the ALU is responsible for selecting between different inputs?

- a. Adder
- b. Comparator
- c. Multiplexer
- d. Shifter

Clear my choice

Question 3

Not yet answered

Marked out of 1.00

What is the result of subtracting 10101 from 11111 in binary?

- a. 01010
- b. 01000
- c. 00110
- d. 00100

Clear my choice

Question 4

Not yet answered

Marked out of 1.00

Which memory type offers the fastest access times among the given options?

- a. Magnetic disk
- b. Optical disk
- c. RAM
- d. Flash memory

Clear my choice

Question 5

Not yet answered

Marked out of 1.00

What role does ROM play in the boot-up process of a computer?

- a. It loads the operating system into RAM.
- b. It stores the user's personal files.
- c. It performs arithmetic calculations for the CPU.
- d. It holds firmware instructions for initiating hardware initialization.

Clear my choice

Question 6

Not yet answered

Marked out of 1.00

What is the purpose of a carry-select adder?

- a. To reduce propagation delay
- b. To reduce power consumption
- c. To perform subtraction
- d. To perform multiplication

Clear my choice

Question 7

Not yet answered

Marked out of 1.00

What is the key characteristic of volatile memory?

- a. It retains data even when power is lost.
- b. It is non-erasable and non-writable.
- c. It loses data when power is removed.
- d. It has slower data access compared to non-volatile memory.

Clear my choice

Question 8

Not yet answered

Marked out of 1.00

Which memory type is non-volatile and often used for firmware storage and system initialization?

- a. RAM
- b. Cache memory
- c. Flash memory
- d. Virtual memory

Clear my choice

Question 9

Not yet answered

Marked out of 1.00

What is the purpose of an adder circuit in digital systems?

- a. Subtraction
- b. Multiplication
- c. Division
- d. Addition

Clear my choice

Question 10

Not yet answered

Marked out of 1.00

In a CPU, which unit is responsible for managing data transfer between the CPU and memory?

- a. ALU
- b. Control Unit
- c. Cache
- d. Memory Management Unit

Clear my choice

Question 11

Not yet answered

Marked out of 1.00

Which memory type offers the fastest data access speed?

- a. Hard disk drive
- b. Optical disk
- c. RAM
- d. Magnetic tape

Clear my choice

Question 12

Not yet answered

Marked out of 1.00

What is the purpose of the stack in computer architecture?

- a. To store data for ALU operations
- b. To store interrupt requests
- c. To store return addresses and local variables
- d. To store machine instructions

Clear my choice

Question 13

Not yet answered

Marked out of 1.00

Which microprocessor architecture is used in Intel's Pentium processors?

- a. ARM
- b. x86
- c. MIPS
- d. SPARC

Clear my choice

Question 14

Not yet answered

Marked out of 1.00

How does a rotate right operation differ from a shift right operation?

- a. They are the same
- b. Rotate right preserves the shifted-out bit
- c. Shift right preserves the shifted-out bit
- d. Rotate right shifts all bits to the left

Clear my choice

Question 15

Not yet answered

Marked out of 1.00

What is the purpose of the program counter (PC) in a CPU?

- a. To store data for arithmetic calculations
- b. To store intermediate results
- c. To store the memory address of the next instruction
- d. To store machine instructions

Clear my choice