

CSCI 254: Introduction to Computer Organization
Midterm 2 -- closed book section
 14 April, 1993

The entire exam is to be turned in at 3:05PM. Work the closed book section first and turn it in before you consult your books and notes to work on the open book section.

There are ten questions. Each is worth three points. Choose the most appropriate phrase for terminating each sentence. Circle your choice.

Name: _____

When discussing computer organization, the abbreviation "PC" usually means

- A: procedure control.
- B: politically correct.
- C: program counter.
- D: printed circuits.

A three-state gate will not effect the value of the bus, when the gate

- A: is 0.
- B: is 1.
- C: is in the high-impedance state.
- D: is in the high-input state.

The two major types of computer control organization are

- A: micro-programmed and hardwired.
- B: milli-programmed and hardwired.
- C: TTL and ECL.
- D: assembler and machine language.

When a computer instruction is executed, the phase in which the opcode is discovered is called the

- A: instruction decode phase.
- B: instruction fetch phase.
- C: register transfer phase.
- D: memory map phase.

The hexadecimal number 4D can be written as the boolean digits

- A: 00101101.
- B: 01001001.
- C: 01001101.
- D: 10110010.

The number of different logic operations that can be performed with two different binary variables is

- A: 4.
- B: 8.
- C: 16.
- D: 32.

People who work with computers think that 256k means

- A: 256,000.
- B: 258,381.
- C: 260,415.
- D: 262,144.

You would expect computer instructions designed to call a subroutine to save

- A: useful registers.
- B: the accumulator.
- C: a return address..
- D: an interrupt vector..

If the opcode is encoded in 5 bits, the computer will have

- A: exactly 5 instructions.
- B: up to 16 instructions.
- C: up to 32 instructions.
- D: exactly 32 instructions.

The control operation that sets a register to zero is usually called

- A: low.
- B: clear.
- C: ground.
- D: init.