

Electronic Board Designer Acceptance Exam

Instructions:

Exam duration: 45 min
Number of questions: 20
Auxiliary material: Closed

Good Luck

Student Name: _____

ID Number: _____

Date of exam: _____

Question 1

"U" is the voltage across a resistor. The power dissipated by the resistor is proportional to:

- A. U
- B. U^2
- C. $1/U$
- D. The dissipated power does not depend on the voltage.

Question 2

One of the differences between bipolar transistors and FETs is that:

- A. The bipolar transistor is controlled by current, the FET, by voltage.
- B. FET logic circuits have higher input impedance than bipolar logic circuits.
- C. A & B are correct.
- D. None of the above is correct.

Question 3

What is a tri-state output?

- A. An output that can have three different voltage values.
- B. An output that is connected to three different inputs.
- C. An output from a state machine.
- D. An output that can enter a state of high impedance.

Question 4

A system has a multiplexed address/data bus. How is the address information stored?

- A. Using a latch
- B. Using a buffer.
- C. You don't need to store the address information.
- D. Using a multiplexer.

Question 5

Chip select signals are used to:

- A. Connect between two CPUs.
- B. Differentiate between a read access and a write access.
- C. Simplify address decoding at the peripheral side.
- D. Generate interrupts.

Question 6

The following are non-volatile memories

- A. SDRAM, DDR, DDR-II
- B. NOR Flash, PROM
- C. NAND Flash, EEPROM
- D. B & C

Question 7

DSP is

- A. Digital Signaling Protocol.
- B. Digital Signal Processor.
- C. Dual Speed Processor.
- D. Data Signaling Path.

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