# 41 Lecture - CS302

# **Important Mcqs**

# 1. Which of the following operations is performed during a read cycle?

- a) The processor sends data to be stored in memory.
- b) The memory module retrieves data and sends it to the processor.
- c) The memory controller manages access to the memory subsystem.
- d) None of the above.

Answer: b

# During a write cycle, where does the processor send data?

- a) To the memory controller.
- b) To the memory module.
- c) To the I/O controller.
- d) None of the above.

Answer: b

# What is the purpose of timing and synchronization in read and write cycles?

- a) To ensure data integrity and proper functioning of the memory subsystem.
- b) To increase memory bandwidth.
- c) To decrease memory latency.
- d) None of the above.

Answer: a

### Which of the following is responsible for managing access to the memory subsystem?

- a) The processor.
- b) The memory module.
- c) The memory controller.
- d) The I/O controller.

Answer: c

## What happens during a read-modify-write cycle?

- a) The processor reads data from memory, modifies it, and writes it back to memory.
- b) The memory module retrieves data and sends it to the processor.
- c) The memory controller manages access to the memory subsystem.
- d) None of the above.

Answer: a

### What is the purpose of a cache in read and write cycles?

- a) To increase memory capacity.
- b) To decrease memory latency.
- c) To increase memory bandwidth.
- d) None of the above.

Answer: b

# Which of the following is used to synchronize read and write cycles in memory modules?

a) Clock signals.

- b) Interrupt signals.
- c) DMA signals.
- d) None of the above.

### Answer: a

# What is the function of the address bus in read and write cycles?

- a) To send data from the processor to memory.
- b) To send data from memory to the processor.
- c) To send memory addresses from the processor to memory.
- d) None of the above.

### Answer: c

# Which of the following is a common type of memory used in modern computer systems?

- a) ROM.
- b) Cache.
- c) HDD.
- d) All of the above.

## Answer: d

# What is the purpose of ECC memory in read and write cycles?

- a) To increase memory bandwidth.
- b) To decrease memory latency.
- c) To detect and correct errors in memory.
- d) None of the above.

## Answer: c