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