

After his lecture you should be able to answer the following questions:

1. What is RAM and What are the differences between SRAM and DRAM?
2. What is cache and how does it work?
3. What is the difference between direct, associate and set associate mapping
4. What are the replacement policies for cache?
5. What are memory managers?

Multiple choice questions (answers on the last page)

1. The access method for cache is
 - a. sequential
 - b. direct
 - c. random
 - d. associative
2. The access method for main memory is
 - a. sequential
 - b. direct
 - c. random
 - d. associative
3. If each block of memory maps to only one cache line, then it is
 - a. direct mapping
 - b. associative mapping
 - c. set associative mapping
 - d. random mapping
4. A write through policy for cache does what?
 - a. Updates memory only when cache block is replaced
 - b. Updates only main memory
 - c. Updates only cache
 - d. Updates Cache and memory
5. A write back policy for cache does what?
 - a. Updates memory only when cache block is replaced
 - b. Updates only main memory
 - c. Updates only cache
 - d. Updates Cache and memory
6. Which replacement algorithm is concerned to be the worst?
 - a. Least Recently used
 - b. FIFO
 - c. Least frequently used
 - d. random
7. What is not a characteristic of DRAM
 - a. simple construction
 - b. charge leak
 - c. digital
 - d. smaller per bit
8. What is not a characteristic of SRAM
 - a. complex construction
 - b. no charge leaks
 - c. analogue
 - d. larger per bit
9. Which is not an effect of dynamic partitioning
 - a. allocate exactly the required memory to a process
 - b. there is wasted memory for each process
 - c. memory becomes fragmented
 - d. coalesce or compaction will be required now and again.

10. One advantage of virtual memory is
- a. trashing of memory
 - b. virtual memory is cheaper, because it not real
 - c. you don't need a medium term scheduler
 - d. running processes bigger then memory

11. When a computer is continuously swapping processes in and out of memory, it is called?

- A. Paging
- B. Dynamic Partitioning
- C. Thrashing
- D. Relocation

12. If the computer allocates exactly the required memory to a process, then what is this called?

- A. swapping
- B. paging
- C. Fixed size partitions
- D. Variable size partitions

1. d 2. c 3. a 4. d 5. c 6. b 7. c 8. c 9. b 10. d 11. c 12. d