

1. There is enough memory for a process P1. However, we cannot allocate space for P1 because we do not have free continuous blocks of memory. What kind of fragmentation is this?

**External fragmentation**

2. What type of fragmentation does paging solve?

**External fragmentation**

3. Which of the following finds the largest unallocated block to satisfy the request?

- a. Best-fit
- b. First-fit
- c. Worst-fit**
- d. Next-fit

4. A page fault is when memory needed is not found in the registers and must be retrieved from memory.

**False**

5. The OS can always hide swapping latency by having other process run while swap is taking place behind the scenes.

**False**

6. What is the primary reason that a Translation Lookaside Buffer(TLB) is used?

**A TLB makes translating virtual addresses to physical addresses faster**

7. Which of the following provides slowest data access?

- a. DRAM
- b. Secondary Storage**
- c. Registers
- d. SRAM

8. Given the following memory partitions in order: 100, 500, 200, 300, 600. Which of the algorithms makes the best use of the machine's memory for the following process sizes 2012, 417, 112, 426(in order). You may assume all of the sizes are in KB.

- a. First-fit
- b. Worst-fit
- c. Best fit**

9. Which of the following is NOT a benefit of dynamic linking?

- a. Logical addresses are translated instruction by instruction into physical addresses at run time**
- b. Applications have access to latest code at run-time

- c. Smaller size, stubs stay stubs unless activated
- d. Can have only one copy of the code that is shared among all applications