C502 – Memory Management Quiz

1. Where is the 'swap space' located?

   (a) Designated area in memory
   (b) CPU Cache
   (c) Hard disk

2. Consider a 16-bit Virtual memory address and a page size of 8 KB. How many pages can a process potentially have?

   (a) 8
   (b) 2
   (c) 10
   (d) 4

3. What causes a page fault?

   (a) The page is not available on disk
   (b) The page is faulty
   (c) The page is not available in memory
   (d) The page is dirty
   (e) The page shouldn't be accessed

4. Increasing the RAM size usually helps with performance. Why?

   (a) Increase in virtual memory
   (b) Faster physical memory
   (c) Not as many segmentation faults
   (d) Reduced Thrashing
   (e) Fewer memory leaks

5. Assume 3 memory frames and a reference string of 1, 2, 3, 6, 2, 1, 5, 3, 2, 4, 6. How many page faults do you get when using the Optimal Algorithm?

   (a) 4
   (b) 5
   (c) 6
   (d) 7
   (e) 8