CSPB 3753 - Fall 2024 - Knox - Operating Systems

Started on	Monday, 11 November 2024, 6:13 PM
State	Finished
Completed on	Monday, 11 November 2024, 6:16 PM
Time taken	3 mins 27 secs
Grade	**10** out of 10 (**100**%)

Question **1**

Correct

Mark 1 out of 1

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

Select one:

○ a. best-fit

○ b. first-fit

○ c. next-fit
    next-fit

◉ d. worst-fit   ✔

The correct answer is: worst-fit

Question **2**

Correct

Mark 1 out of 1

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

Select one:

○ True

◉ False ✔

The correct answer is 'False'.

Question **3**

Correct

Mark 1 out of 1

Translation look-aside buffer is used to reduce the number of direct memory references

Select one:

◉ True ✔

○ False

The correct answer is 'True'.

Question **4**

Correct

Mark 1 out of 1

Which of the following provides slowest data access?

Select one:

○ a. DRAM

○ b. Registers

○ c. SRAM

◉ d. Secondary Storage   ✔

The correct answer is: Secondary Storage

Question **5**

Correct

Mark 1 out of 1

Which of the following are examples of volatile storage?

Select one or more:

☐ a. Flash

☐ b. Disk

☑ c. Main Memory   ✔

☑ d. Registers   ✔

The correct answers are: Main Memory, Registers

Question **6**

Correct

Mark 1 out of 1

There is enough memory for a process P1 to be loaded. However, we do not need all the space allocated for P1. What kind of fragmentation is this?

Select one:

◉ a. Internal fragmentation   ✔

◯ b. External fragmentation

◯ c. Segmentation

◯ d. Obfuscation

The correct answer is: Internal fragmentation

Question **7**

Correct

Mark 1 out of 1

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

Select one:

○ a. Internal fragmentation

◉ b. External fragmentation   ✔

○ c. Segmentation

○ d. None of the above

The correct answer is: External fragmentation

Question **8**

Correct

Mark 1 out of 1

What type of fragmentation does paging solve?

Select one:

◉ a. External   ✔

○ b. Internal

○ c. Both external and internal

○ d. None

The correct answer is: External

Question **9**

Correct

Mark 1 out of 1

Which of the following is NOT true about shared pages?

Select one:

○ a. Shared code should be thread safe and reentrant

○ b. A child process can point directly to the parent's code pages without the need for duplication

○ c. Can share libraries between multiple processes

◉ d. Sharing pages improves memory access time   ✔

The correct answer is: Sharing pages improves memory access time

Question **10**

Correct

Mark 1 out of 1

The use of inverted page tables is a solution to which problem?

Select one:

○ a. Low RAM utilization

○ b. Contiguous memory indexing

○ c. Increased fragmentation

◉ d. Sparse page tables   ✔

The correct answer is: Sparse page tables