<question>Question 1. Choose the heuristic that best applies to the following example: the dreaded spinning circle on YouTube.

<variant>Visibility of system status

<variantright>Visibility of system status

<variant>Flexibility and efficiency of use

<variant>Help and documentation

<variant>Recognition rather than recall

<question>Question 2. For every process there is a:

<variant>page table

<variantright>page table

<variant>pointer to page table

<variant>copy of page table

<variant>frame table

<question>Question 3. A solution to the problem of external fragmentation is:

<variant>compaction

<variantright>compaction

<variant>larger memory space

<variant>unequal size parts

<variant>smaller memory space

<question>Question 4. Which of the replacement algorithms replaces the page in memory that has not been referenced for the longest time?

<variant>LRU

<variantright>LRU

<variant>FIFO

<variant>Clock

<variant>optimal

<question>Question 5. What does process page table entry contain?

<variant>the frame number of corresponding page in main memory

<variantright>the frame number of corresponding page in main memory

<variant>size of the process

<variant>virtual address of the page that is used by program

<variant>physical address of the page in secondary memory

<question>Question 6. If a page number is not found in the TLB, then it is known as a:

<variant>TLB miss

<variantright>TLB miss

<variant>page fault

<variant>buffer miss

<variant>TLB hit

<question>Question 7. Which of the replacement algorithms selects for replacement that page for which the time to the next reference is the longest?

<variant>optimal

<variantright>optimal

<variant>LRU

<variant>FIFO

<variant>Clock

<question>Question 8. Consider a logical address space of 64 pages of 1,024 words each, mapped onto a physical memory of 32 frames. How many bits are there in the logical address?

<variant>16

<variantright>16

<variant>14

<variant>15

<variant>17

<question>Question 9. For 4 page frames, the following is the reference string: 12342156212376321236 How many page faults does the Clock page replacement algorithm produce (including page faults when the frames were free)?

<variant>14

<variantright>14

<variant>12

<variant>8

<variant>10

<question>Question 10. What is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks?

<variant>paging

<variantright>paging

<variant>segmentation

<variant>virtual memory

<variant>partition

<question>Question 11. Operating System maintains the page table for:

<variant>each process

<variantright>each process

<variant>each address

<variant>each thread

<variant>each instruction

<question>Question 12. What is the real address?

<variant>a physical address in main memory

<variantright>a physical address in main memory

<variant>a virtual address in main memory

<variant>a virtual address in secondary memory

<variant>a physical address in cache memory

<question>Question 13. If a page table entry is not in main memory, then it is known as a:

<variant>page fault

<variantright>page fault

<variant>TLB hit

<variant>buffer miss

<variant>TLB miss

<question>Question 14. In internal fragmentation, memory is internal to a partition and:

<variant>is not being used

<variantright>is not being used

<variant>is always used

<variant>is being used

<variant>none of the above

<question>Question 15. The memory allocation scheme subject to "internal" fragmentation is:

<variant>fixed partitioning

<variantright>fixed partitioning

<variant>virtual memory segmentation

<variant>pure demand paging

<variant>segmentation

<question>Question 16. What is virtual address?

<variant>The address of a storage location in virtual memory

<variantright>The address of a storage location in virtual memory

<variant>The address of a storage location in main memory

<variant>The address of a storage location in cache memory

<variant>The address of a storage location in real memory

<question>Question 17.When a program tries to access a page that is mapped in address space but not loaded in physical memory, then:

<variant>page fault occurs

<variantright>page fault occurs

<variant>fatal error occurs

<variant>segmentation fault occurs

<variant>no error occurs

<question>Question 18. The operating system maintains a *\_\_* table that keeps track of how many frames have been allocated, how many are there, and how many are available.

<variant>frame

<variantright>frame

<variant>memory

<variant>page

<variant>segment

<question>Question 19. When memory is divided into several fixed-sized partitions, each partition may contain:

<variant>exactly one process

<variantright>exactly one process

<variant>none of the above

<variant>at least one process

<variant>multiple processes at once

<question>Question 20. Which of the replacement algorithms treats the page frames allocated to a process as a circular buffer?

<variant>Clock

<variantright>Clock

<variant>FIFO

<variant>optimal

<variant>LRU

<question>Question 21. Variable-length block of data that resides in secondary memory is called *\_\_.*

<variant>segments

<variantright>segments

<variant>pages

<variant>none of the above

<variant>frames

<question>Question 22. The memory allocation scheme subject to "external" fragmentation is:

<variant>segmentation

<variantright>segmentation

<variant>multiple contiguous fixed partitions

<variant>pure demand paging

<variant>swapping

<question>Question 23. For 3 page frames, the following is the reference string: 7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1 How many page faults does the Optimal page replacement algorithm produce (including page faults when the frames were free)?

<variant>14

<variantright>14

<variant>15

<variant>9

<variant>12

<question>Question 24. For 4 page frames, the following is the reference string: 1 2 3 4 2 1 5 6 2 1 2 3 7 6 3 2 1 2 3 6 How many page faults does the Optimal page replacement algorithm produce (including page faults when the frames were free)?

<variant>12

<variantright>12

<variant>14

<variant>10

<variant>8

<question>Question 25. Which of the following is used as an index into the page table?

<variant>page number

<variantright>page number

<variant>page offset

<variant>frame offset

<variant>frame bit

<question>Question 26. The *\_\_* table contains the base address of each page in physical memory.

<variant>page

<variantright>page

<variant>frame

<variant>process

<variant>memory