Question 1: What is the main purpose of an operating system?
a. To manage hardware and software resources
b. To create and delete files
c. To run applications
d. To provide a graphical user interface
Question 2: Which of the following is NOT a type of memory management technique?
a. Contiguous memory allocation
b. Non-contiguous memory allocation
c. Virtual memory
d. Disk caching
Question 3: What is the purpose of paging?
a. To divide physical memory into fixed-sized blocks
b. To divide logical memory into blocks of the same size

c. To avoid external fragmentation
d. All of the above
Question 4: What is the advantage of segmentation?
a. No internal fragmentation
b. Efficient working within segments
c. Smaller size of segment table
d. All of the above
Question 5: What is the main disadvantage of virtual memory?
a. Increased swap time
b. Increased physical memory requirements
c. Thrashing
d. All of the above

Question 6: Which page replacement algorithm is based on the principle of replacing the oldest page?
a. FIFO
b. LRU
c. Optimal
d. LFU
Question 7: Which page replacement algorithm has the lowest page fault rate?
a. FIFO
b. LRU
c. Optimal
d. LFU
Question 8: What is the main cause of thrashing?
a. Too few frames allocated to a process
b. Too many frames allocated to a process

c. High page-fault rate
d. Low page-fault rate
Question 9: Which of the following is a technique to handle thrashing?
a. Working set model
b. Page fault frequency
c. Belady's anomaly
d. None of the above
Question 10: What is the difference between a process and a thread?
a. A process is a program under execution, while a thread is a single sequence stream within a process
b. A thread is a program under execution, while a process is a single sequence stream within a thread
c. A process and a thread are the same thing

d. None of the above
Question 11: Which of the following is a benefit of multi-threading?
a. Responsiveness
b. Resource sharing
c. Economy
d. All of the above

Answers

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Question 2: d

Question 3: d

Question 4: d

Question 5: d

Question 6: a

Question 7: c

Question 8: a

Question 9: a

Question 10: a

Question 11: d