**Questions:**

1. **Which of the following is a primary purpose of memory management?**
   * A) To control the execution of processes
   * B) To allocate CPU time to processes
   * C) To manage the allocation and deallocation of memory space
   * D) To handle input/output operations
2. **In paging, what is the fixed-size block of physical memory called?**
   * A) Frame
   * B) Segment
   * C) Page
   * D) Block
3. **Which memory management technique divides memory into segments based on the logical divisions of a program?**
   * A) Paging
   * B) Contiguous Allocation
   * C) Segmentation
   * D) Swapping
4. **What problem is most commonly associated with contiguous memory allocation?**
   * A) Page Faults
   * B) Fragmentation
   * C) Thrashing
   * D) Deadlocks
5. **What is the term for the process of moving processes between main memory and disk to manage space?**
   * A) Paging
   * B) Segmentation
   * C) Swapping
   * D) Fragmentation
6. **Which of the following is true about a page fault?**
   * A) It occurs when a process accesses a page not currently in memory.
   * B) It occurs when a process tries to access an address that is already in memory.
   * C) It is a condition where two processes access the same memory location.
   * D) It happens when memory is allocated to a process.
7. **In virtual memory systems, which table maps virtual addresses to physical addresses?**
   * A) Segment Table
   * B) Page Table
   * C) Frame Table
   * D) Translation Lookaside Buffer (TLB)
8. **Which algorithm is used to manage the replacement of pages in virtual memory?**
   * A) First-Come-First-Served (FCFS)
   * B) Round-Robin Scheduling
   * C) Least Recently Used (LRU)
   * D) Shortest Job Next (SJN)
9. **What type of memory allocation allows a program to use more memory than physically available by using disk space as an extension of RAM?**
   * A) Paging
   * B) Segmentation
   * C) Swapping
   * D) Virtual Memory
10. **What is the main advantage of using segmentation over paging?**
    * A) Segmentation reduces internal fragmentation.
    * B) Segmentation provides a more flexible memory allocation scheme.
    * C) Segmentation eliminates external fragmentation.
    * D) Segmentation always results in faster process execution.

**Answers:**

1. **C) To manage the allocation and deallocation of memory space**
2. **A) Frame**
3. **C) Segmentation**
4. **B) Fragmentation**
5. **C) Swapping**
6. **A) It occurs when a process accesses a page not currently in memory.**
7. **B) Page Table**
8. **C) Least Recently Used (LRU)**
9. **D) Virtual Memory**
10. **B) Segmentation provides a more flexible memory allocation scheme.**

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