	Paging	Segmentation
Basic Idea	Divide memory into fixed-size chunks (pages)	Divide memory into variable-size logical units (segments)
Unit of Memory	Pages	Segments
Unit of Address	Page numbers	Segment numbers or offsets within segments
Hardware	Requires hardware support (page table, TLB)	Requires hardware support (segment table, segment registers)
Memory Mapping	Pages are mapped linearly to physical memory addresses	Segments are mapped non-linearly to physical memory addresses
Fragmentation	May result in internal fragmentation	May result in external fragmentation
Access Control	Can control access to individual pages	Can control access to entire segments or portions of segments
Memory Sharing	Allows for memory sharing at the page level	Allows for memory sharing at the segment level

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- 59. What do you mean by Virtual Memory? Write down its advantages?
- 60. What is Process Scheduling, CPU Scheduling, Disk Scheduling? Explain Short, Medium and Long term Scheduler?

- 61. Explain concept of a process with its components ?
- 62. Explain the following in brief Contiguous and Linked list allocation for implementing file system?
- 63. Explain various Disk scheduling algorithms with Illustrations ?
- 64. Define process and thread. What is PCB ? Explain its various entries with their usefulness ?
- 65. Discuss advantages and disadvantages of the Buffer cache ?
- 66. Explain different types of OS with examples of each ?
- 67. What is an Operating System? Write down its desirable characteristics ?
- 68. Define a deadlock ? Write down the conditions responsible for deadlock? How can we recover from deadlock ?
- 69. What are the various services provided by Operating system ?
- 70. What do you mean by PCB? Where is it used? What are its contents? Explain.
- 71. What is Binary and Counting semaphores ?
- 72. What is File? What are the different File attribute and operations?
- 73. What are System call? Explain briefly about various types of system call provided by an Operating System?
- 74. Describe necessary conditions for deadlocks situation to arise.
- 75. What are points to be consider in file system design? Explain linked list allocation in detail?
- 76. Write a Semaphore solution for dining Philosopher's problem?
- 77. Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5.How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU
- 78. Explain CPU schedulers in operating system?
- 79. Write the different state of a process with the help of Process state deagram?
- 80. What is Mutex in operating system?

Compare Paging and Segmentation?

- 81. Explain Network operating system?
- 82. What do you mean by paging in operating system ?