**Chapter-1**

**Chapter-2**

1. Discuss the objectives of the operating system.
2. Briefly discusses the evolution of the operating system. (How operating system evolved over the years?)
3. Discuss five major theoretical advances in the development of operating systems.
4. Briefly discusses the categories of information protection and security related to operating systems.
5. Discuss key elements of the operating system for multiprogramming with the figure.
6. Briefly discuss the operating system design hierarchy in level 13 to level 1.

**Chapter-3**

1. What is the process? Explain the process control block with the necessary figure in brief.
2. Explain the two-state process model with the necessary figure.
3. Briefly discuss the reasons for process creation.
4. Briefly discuss the reasons for process termination.
5. Explain the five-state process model in detail.
6. What are ready queues and blocked queues?
7. What is suspended process?
8. Briefly explain the need for swapping.
9. Explain process state transition diagram with one suspended state.
10. Explain process state transition diagram with two suspended state.
11. Briefly discuss the reasons for process suspension.
12. Discuss general structure of operating system control tables.
13. Briefly discuss process control structure.

**Chapter-7**

1. Explain the requirements of memory management in detail.
2. Briefly discuss fixed partitioning and dynamic partitioning approach in memory management.
3. Briefly explain the two characteristics of paging and segmentation as a breakthrough in memory Management.

**Chapter-8**

1. Briefly explain the characteristics of paging and segmentation without virtual memory.
2. What do you understand by the term virtual memory? Briefly explain the characteristics of paging and segmentation with virtual memory
3. Explain mechanism of translating virtual address in to physical address using paging only mechanism. Draw necessary diagram.
4. Explain mechanism of translating virtual address in to physical address using segmentation only mechanism. Draw necessary diagram.
5. Explain mechanism of translating virtual address in to physical address using combined paging and segmentation mechanism.
6. Briefly discuss operating system policies for virtual memory.