- **Ch 7**

- Compare between complex and simple file systems?
- List file attributes ?
- Compare between open & close file?
- List operations on directories?
- List privileges of tree directories?
- Explain file mounting ?
- Compare , explain each file sharing , multi , remote , failure mode?
- What can he file owner control ?
- List file types?

- Ch 8

- Explain polling ?
- Explain interrupts ?
- Compare between polling & interrupts ?
- Explain DMA?
- List i/o devices & explain each ?
- Compare between blocking & nonblocking & asynchronous ?
- Explain buffering & list its privileges ?
- Why i/o is a major factor in system ?
- How to improve i/o performance?

- Ch 9

- Compare between security & protection ?
- Define privilege escalation ?
- Define protection problem ?
- Define least privilege ?
- Define access rights?
- Explain the access matrix?
- List the access matrix implementations & explain each ?
- Define privilege ?
- Explain the problem in revocation capability & access list?

- Ch 10

- Explain security problem ?
- List security violation categories ?
- List violation methods?
- List security measure levels?
- Explain cryptography ?
- Explain and list each of system & networking , programs threats ?
- Compare between encryption & decryption ?
- Explain authentication ?
- Compare , explain , list implementations of security defense?
- Compare between signature based & behavior based?

- Ch 11

- Compare , explain , list implementations of vmm ?
- Define paravirtualization ?
- List benefits of vmm?
- Whats the solution for i/o problem in vmm ?
- Explain live migration ?
- Explain each os component ? prob & sol ?

- Ch 12

- List reasons for distributed systems?
- Compare between network & distributed systems?
- Compare , explain LAN & WAN ?
- Discuss Communication structure design ?
- Explain TCP/IP?
- How to detect failure?
- Explain reconfiguration ?
- List design issues?
- Explain consistency & remote file access & naming & transparency ?
- Explain DFS & its structure ?