42 Lecture - CS501

Important Mcqs

- 1. Which of the following is NOT a factor that affects the performance of I/O subsystems?
 - a) Speed and capacity of devices
 - b) Efficiency of the operating system's I/O handling mechanisms
 - c) Workload characteristics of the applications
 - d) Type of processor used

Solution: d) Type of processor used

Which of the following is a technique used to improve I/O performance?

- a) Virtual memory
- b) RAID
- c) Multi-core processing
- d) Pipelining

Solution: b) RAID

Which of the following is NOT an example of a peripheral device?

- a) Hard disk
- b) Keyboard
- c) Memory
- d) Printer

Solution: c) Memory

Which of the following is a metric used to measure I/O performance?

- a) Bandwidth
- b) Clock speed
- c) Cache size
- d) Instruction set

Solution: a) Bandwidth

Which of the following can improve I/O performance by reducing the number of I/O operations required?

- a) Virtual memory
- b) DMA
- c) Interrupts
- d) Polling

Solution: b) DMA

Which of the following is an I/O handling mechanism used by operating systems?

- a) Interrupts
- b) Bit manipulation
- c) Vectorization
- d) Load balancing

Solution: a) Interrupts

Which of the following is a technique used to reduce I/O latency?

a) Caching

- b) Compression
- c) Encryption
- d) Hashing

Solution: a) Caching

Which of the following is NOT a type of RAID configuration?

- a) Mirroring
- b) Striping
- c) Parity
- d) Compression

Solution: d) Compression

Which of the following is an I/O workload characteristic?

- a) Memory usage
- b) Processor utilization
- c) Read/write ratio
- d) Network bandwidth

Solution: c) Read/write ratio

Which of the following is an advantage of solid-state drives (SSDs) over hard disk drives (HDDs)?

- a) Larger capacity
- b) Higher latency
- c) Lower power consumption
- d) Lower cost per gigabyte

Solution: c) Lower power consumption