# 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