

27 Lecture - CS501

Important Mcqs

1. What is Interrupt Driven I/O?

- A) A technique to prevent I/O operations from interfering with CPU
- B) A technique to improve system performance by allowing CPU to perform other tasks while waiting for I/O operations
- C) A technique to speed up I/O operations by reducing the overhead of context switching
- D) A technique to eliminate the need for interrupt signals

Answer: B

What happens when a device generates an interrupt signal in Interrupt Driven I/O?

- A) The device stops working
- B) The CPU stops its current task and starts executing the interrupt service routine
- C) The CPU continues its current task and ignores the interrupt signal
- D) The device's data is lost

Answer: B

What is the purpose of the interrupt service routine in Interrupt Driven I/O?

- A) To communicate with the device and transfer data between the device and CPU's memory
- B) To stop the CPU's current task and start executing the interrupt signal
- C) To ignore the interrupt signal and continue the CPU's current task
- D) To prevent I/O operations from interfering with CPU

Answer: A

Which of the following statements is true about Interrupt Driven I/O?

- A) It eliminates the overhead of context switching
- B) It reduces the need for interrupt signals
- C) It can improve system performance
- D) It slows down I/O operations

Answer: C

What is the disadvantage of Interrupt Driven I/O?

- A) It introduces overhead due to context switching and interrupt handling
- B) It cannot improve system performance
- C) It cannot prevent I/O operations from interfering with CPU
- D) It can only be used with certain types of devices

Answer: A

In Interrupt Driven I/O, what does the CPU do when it receives an interrupt signal?

- A) It stops its current task and starts executing the interrupt service routine
- B) It continues its current task and ignores the interrupt signal
- C) It stops working
- D) It sends an interrupt signal to the device

Answer: A

What is the role of the device in Interrupt Driven I/O?

- A) To generate an interrupt signal when it is ready to send or receive data

- B) To execute the interrupt service routine
- C) To prevent I/O operations from interfering with CPU
- D) To eliminate the overhead of context switching

Answer: A

Which of the following can Interrupt Driven I/O improve?

- A) Memory access time
- B) Disk latency
- C) Network bandwidth
- D) CPU clock speed

Answer: B

How does Interrupt Driven I/O improve system performance?

- A) By preventing I/O operations from interfering with CPU
- B) By reducing the need for interrupt signals
- C) By eliminating the overhead of context switching
- D) By allowing CPU to perform other tasks while waiting for I/O operations

Answer: D

What is the benefit of using Interrupt Driven I/O?

- A) It reduces the need for interrupt signals
- B) It can prevent I/O operations from interfering with CPU
- C) It eliminates the overhead of context switching
- D) It improves system performance by allowing CPU to perform other tasks while waiting for I/O operations

Answer: D