

31 Lecture - CS501

Important Subjective

1. **What is Direct Memory Access (DMA)?**

Answer: DMA is a technique that allows data to be transferred between peripheral devices and memory without the intervention of the processor.

What is the primary function of DMA?

Answer: The primary function of DMA is to reduce the load on the processor by allowing data transfers without its intervention.

How does DMA improve system performance?

Answer: DMA improves system performance by reducing the load on the processor and allowing for faster data transfer rates.

What is a DMA controller?

Answer: A DMA controller is a component that is used to manage the transfer of data using DMA.

What are the types of DMA transfers?

Answer: The types of DMA transfers include single, burst, and cycle-stealing transfers.

Can DMA be used with all types of peripheral devices?

Answer: Yes, DMA can be used with all types of peripheral devices.

What is the disadvantage of using DMA?

Answer: One disadvantage of using DMA is that it can result in data corruption.

How is DMA different from programmed I/O?

Answer: DMA allows for faster data transfer rates and reduces the load on the processor, while programmed I/O requires the processor to transfer data between peripheral devices and memory.

Can DMA transfer data in both directions?

Answer: No, DMA can only transfer data in one direction.

Is DMA widely used in modern computer systems?

Answer: Yes, DMA is widely used in modern computer systems to improve system performance.