22 Lecture - CS501

Important Mcqs

1. What is microprogramming?

- a) A technique used to implement complex instructions in a processor
- b) A technique used to implement simple instructions in a processor
- c) A technique used to implement parallel processing in a processor
- d) A technique used to implement pipelining in a processor

Solution: a) A technique used to implement complex instructions in a processor

What is a microinstruction?

- a) A complex instruction broken down into smaller units
- b) A simple instruction broken down into smaller units
- c) A set of instructions executed in parallel
- d) A set of instructions executed out of order

Solution: a) A complex instruction broken down into smaller units

What is a control memory in microprogramming?

- a) A memory that stores microinstructions
- b) A memory that stores data
- c) A memory that stores the program counter
- d) A memory that stores the instruction pointer

Solution: a) A memory that stores microinstructions

What is the purpose of microprogramming?

- a) To implement complex instructions in a processor
- b) To implement simple instructions in a processor
- c) To increase the clock speed of a processor
- d) To reduce the power consumption of a processor

Solution: a) To implement complex instructions in a processor

What is the advantage of microprogramming?

- a) It facilitates the implementation of complex instructions
- b) It increases the clock speed of a processor
- c) It reduces the power consumption of a processor
- d) It reduces the complexity of a processor

Solution: a) It facilitates the implementation of complex instructions

Which of the following is a disadvantage of microprogramming?

- a) It increases the complexity of a processor
- b) It reduces the clock speed of a processor
- c) It increases the power consumption of a processor
- d) It reduces the number of available instructions in a processor

Solution: a) It increases the complexity of a processor

What is the difference between microprogramming and hardwired control?

a) Microprogramming uses software to control the processor, while hardwired control uses

hardware

- b) Microprogramming is slower than hardwired control
- c) Microprogramming is less complex than hardwired control
- d) Microprogramming is less flexible than hardwired control

Solution: a) Microprogramming uses software to control the processor, while hardwired control uses hardware

What is a microprogram counter in microprogramming?

- a) A register that holds the address of the current microinstruction
- b) A register that holds the address of the next microinstruction
- c) A register that holds the address of the current instruction
- d) A register that holds the address of the next instruction

Solution: a) A register that holds the address of the current microinstruction

Which of the following is an example of a microinstruction?

- a) Load
- b) Add
- c) Subtract
- d) Fetch

Solution: d) Fetch

What is the role of the microsequencer in microprogramming?

- a) To generate the address of the next microinstruction
- b) To execute the microinstructions
- c) To store the microinstructions
- d) To fetch the microinstructions

Solution: a) To generate the address of the next microinstruction