# 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