# 13 Lecture - CS501

# **Important Mcqs**

#### 1. What is the FALCON-A?

- A) A programming language
- B) A microprocessor
- C) A memory hierarchy
- D) A control unit

Answer: B

# What is Structural RTL Description?

- A) A programming language
- B) A hardware-level design language
- C) An operating system
- D) A database management system

Answer: B

#### What does the Structural RTL Description of the FALCON-A include?

- A) Description of the instruction set architecture
- B) Description of the caches
- C) Description of the main memory
- D) All of the above

Answer: D

#### What is the datapath of the FALCON-A?

- A) The memory hierarchy
- B) The control unit
- C) The registers and ALU
- D) The instruction set architecture

**Answer: C** 

## What is the control unit of the FALCON-A responsible for?

- A) Performing arithmetic and logical operations
- B) Controlling the flow of data
- C) Storing data and instructions
- D) None of the above

**Answer: B** 

# What is the memory hierarchy of the FALCON-A?

- A) The registers and ALU
- B) The control unit
- C) The caches, main memory, and other components
- D) The instruction set architecture

Answer: C

#### What is the purpose of using Structural RTL Description in CPU design?

A) To describe the software programs that run on the CPU

- B) To test the CPU's behavior and functionality
- C) To create the physical layout of the CPU
- D) To manage the CPU's power consumption

#### **Answer: B**

# Which of the following is not included in the Structural RTL Description of the FALCON-

- A) Description of the datapath
- B) Description of the instruction set architecture
- C) Description of the input/output devices
- D) Description of the memory hierarchy

#### **Answer: C**

## What is the benefit of using a Structural RTL Description in CPU design?

- A) It allows for the creation of simulation models
- B) It reduces the size of the CPU
- C) It increases the CPU's clock speed
- D) It improves the CPU's power consumption

## Answer: A

# What is the FALCON-A designed for?

- A) Low-performance computing applications
- B) High-performance computing applications
- C) Mobile devices
- D) None of the above

#### **Answer: B**