

5 Lecture - CS501

Important Mcqs

1. What is SRC?

- A. A computer architecture following the CISC approach
- B. A computer architecture following the RISC approach
- C. A programming language
- D. A data structure

Answer: B

What does RTL stand for?

- A. Register Transfer Logic
- B. Register Transfer Level
- C. Random Transmission Line
- D. Remote Transfer Language

Answer: B

What is the size of an SRC instruction word?

- A. 8 bits
- B. 16 bits
- C. 24 bits
- D. 32 bits

Answer: D

What is the purpose of the ALU in SRC?

- A. To handle communication between the processor and memory
- B. To store the operands and intermediate results during instruction execution
- C. To generate control signals for various components
- D. To perform arithmetic and logic operations on the operands

Answer: D

What is the role of the control unit in SRC?

- A. To handle communication between the processor and memory
- B. To store the operands and intermediate results during instruction execution
- C. To generate control signals for various components
- D. To perform arithmetic and logic operations on the operands

Answer: C

What does the memory interface do in SRC?

- A. Performs arithmetic and logic operations on the operands
- B. Stores the operands and intermediate results during instruction execution
- C. Generates control signals for various components
- D. Handles communication between the processor and memory

Answer: D

How are instructions encoded in SRC?

- A. Using a variable format

- B. Using a hybrid format
- C. Using a fixed format
- D. Using a floating-point format

Answer: C

What types of instructions are included in the SRC instruction set?

- A. Only arithmetic and logic operations
- B. Only data transfer and control flow instructions
- C. Basic operations such as arithmetic and logic operations, as well as data transfer and control flow instructions
- D. Only data transfer instructions

Answer: C

What is the goal of SRC architecture design?

- A. To have a complex and diverse instruction set
- B. To have a streamlined and simple instruction set
- C. To have a large number of complex hardware components
- D. To have a large number of software instructions

Answer: B

What is required to implement SRC in RTL?

- A. Understanding of the SRC architecture and the ability to design and implement the hardware components using RTL
- B. Understanding of a high-level programming language
- C. Understanding of data structures
- D. Understanding of compiler design

Answer: A