

Assembler Test

1. Explain the role of the Arithmetic Logic Unit (ALU) in the operations of a microprocessor. ----- [2]
2. Explain the role of the Control Unit (CU) in the operation of a microprocessor. ----- [2]
3. Outline the Fetch-Execute cycle, making reference to the role it plays in the execution of computer programs. - [6]
4. Explain the role of Program Counter (PC) and Instruction Register (IR) in the Fetch-Execute cycle. ----- [3]
5. Explain the purpose of the Condition Code Register (CCR), giving an example of a situation in which it is used. ----- [2]
6. With the aid of a diagram, explain the role of a Compiler in process by which machine code is generated from a high-level computer program. ----- [4]
7. Show the general form of a statement in assembler, giving a example of a specific statement and showing how it related to this general form. ----- [5]
8. Give an example of an arithmetic instruction in assembler. ----- [5]
9. Explain immediate addressing, giving an example of an instruction that uses this addressing mode. ----- [2]
10. Explain absolute addressing, giving an example of an instruction that uses this addressing mode and showing one disadvantage of absolute addressing. ----- [4]

Answers: See lecture slides.