# Homework 1 Processor components

1. A processor contains the Arithmetic Logic Unit (ALU) and the Control Unit.   
   1. Describe the role of the the Control Unit. [2]  
      It coordinates the activity of the components in the CPU

Control signals are sent via the control bus to the several components

* 1. Name five registers used in the Fetch-Execute cycle. [5]

Program Counter – Holds the address of the next instruction in ram

Memory Address Register – holds the address in memory to fetch/store data from/to

Memory Data Register – holds data that is moving between the CPU and main memory

Current Instruction Register – holds the current instruction which is split into opcode and operand

Accumulator – Holds the intermediate results of an instruction

State how each of them is used within this cycle. [5]

[Total 12 marks]