Upon reading the material, you should be able to answer the following question:

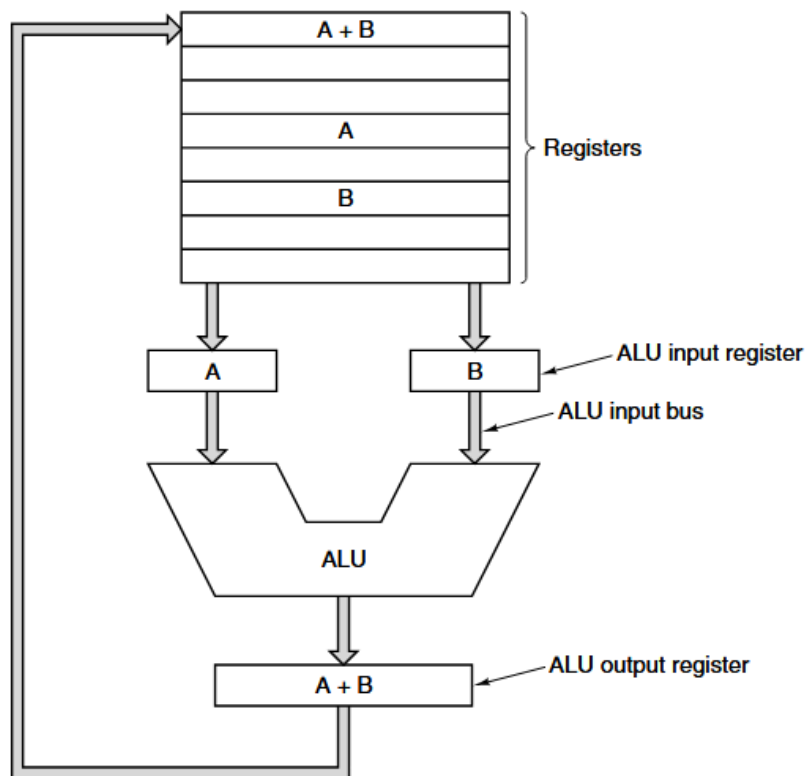1. What is an ALU, and which operations can it perform?

   Arithmetic, Logic operations

2. What is the datapath?
   The datapath is a collection of registers, ALU and busses. It can be said that the
   datapath is how data moves, and is processed (i.e Calculation).

3. What is understood by a Von Neumann architecture?

   Memory, bus and ALU all connected, as shown in fig:

4. What is a register - and an accumulator?

   Register is fast storage, but usually very small, and is used for storing data
   temporarily. accumulatoor is a register, for storing the ALU results, for example in
   longer calculations. Kind of like humans 2+2+2 , we calculate 2+2 and store 4, where
   we then +2 and get 6.

5. What is understood by the term "busses" in a computer system, and what are the
   different types of busses?
   A bus is an electrical pathway between multiple devices. i.e transporting data
   between two different entities. Different types of busses exist, and depends on
   specification. You can can have an I/O bus that transports data to keyboard, mouse
   or printer etc… It should just follow the bus protocol. Devices attached to busses can
   act as either master or slaves. For example CPU master and memory slave is

fetching instructions and data, whilst I/O device master and memory slave enables direct memory access. Also interrupts.

Parameters such as Bus width, clocking