

## Questions

1) The arithmetic logic unit (ALU) is one component of the CPU.

a) List **three** other components of the central processing unit (CPU). [3]

b) Describe the purpose of the ALU, giving examples. [3]

c) Explain how the fetch-execute cycle processes an instruction. [1]

2) The fetch execute cycle uses a number of registers.

a) Which register stores the instruction to be executed?

A PC

B MAR

C MDR

D CIR

E ACC

[1]

b) Which register stores the result of the current calculation?

A PC

B MAR

C MDR

D CIR

E ACC

[1]

c) Which register stores the data when it is fetched from memory?

A PC

B MAR

C MDR

D CIR

E ACC

[1]

4) The size of cache can affect the performance of the CPU.

a) State two other factors that can affect the performance of the CPU. [2]

b) Explain how the cache size can affect the performance of the CPU:

[2]