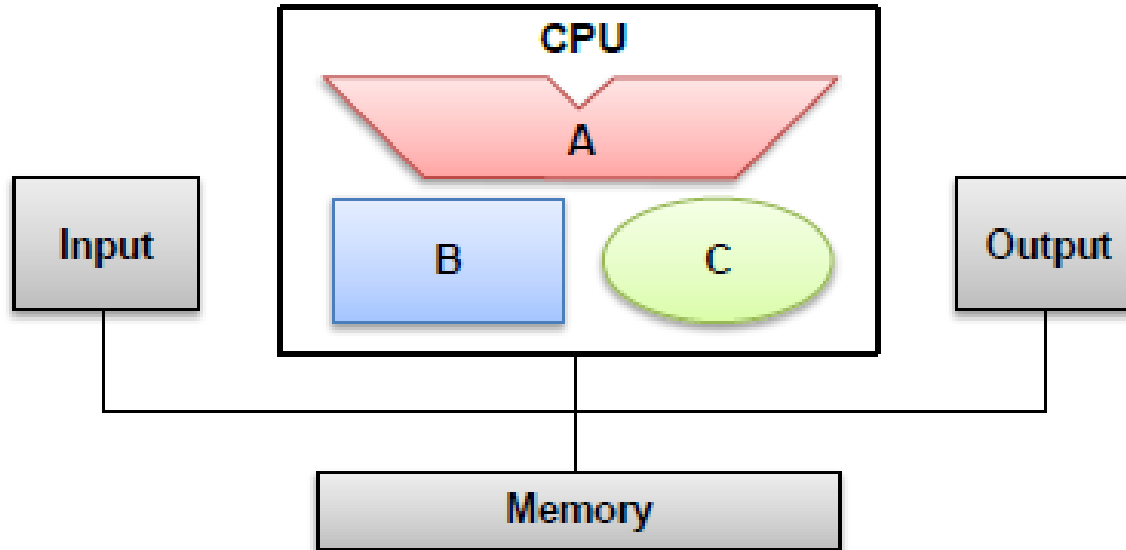


# Sample 2017 - CPU components

Below is a partially labelled diagram of a Von Neumann type architecture computer, with a single core Central Processing Unit (CPU).



- (a) State the purpose of the components A, B and C above. [3]

Component A: .....

.....

Component B: .....

.....

Component C: .....

.....

# 2016 - CPU components

Name four components of the Central Processing Unit (CPU) and describe the function of each named component. [8]

Component 1 .....

Function .....

.....  
.....

Component 2 .....

Function .....

.....  
.....

Component 3 .....

Function .....

.....  
.....

Component 4 .....

Function .....

.....

(c) Explain how main memory is used during the fetch-decode-execute cycle.

[3]

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

- (b) Cache size, clock speed and number of cores are the **three** main factors that affect performance. Describe how performance is affected by these **three** factors. [6]

.....

.....

.....

.....

.....

## 2014 – CPU Performance

.....

(c) Describe what is meant by a *dual-core* CPU. State a possible benefit of its use. [2]

.....

.....

.....

.....

(d) Describe what is meant by the term 5GHz. [2]

.....

.....

.....

.....