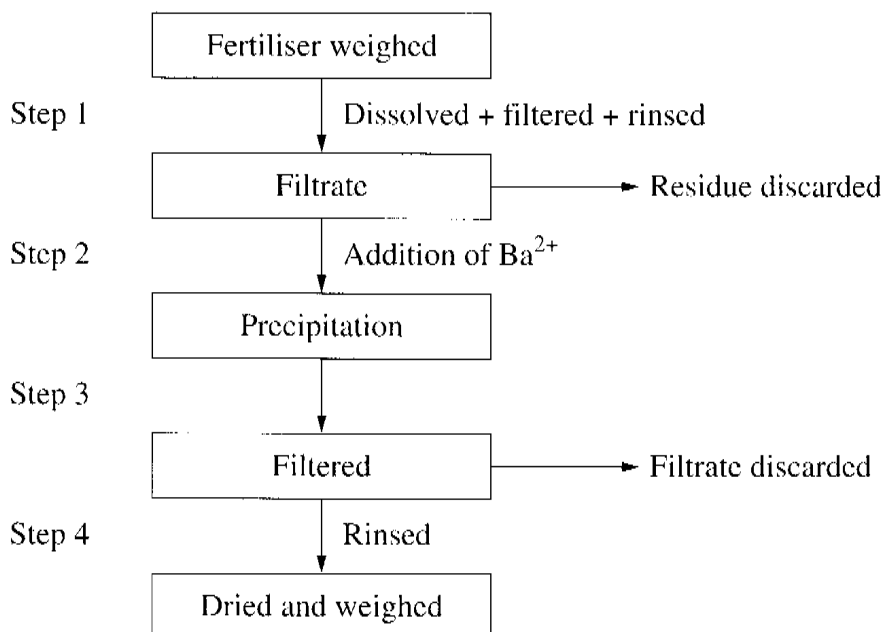


Question 29 (6 marks)

The flowchart shown outlines the process used to determine the amount of sulfate present in a sample of lawn fertiliser.



- (a) What assumptions were made and how do these affect the validity of this process? 3

It is assumed when the residue is discarded that all the sulfate present in the fertiliser has been dissolved, ~~therefore~~ which if it has not would produce invalid results at the end of the experiment.

- (b) It was found that 4.25 g had a sulfate content of 35%. 3

What is the mass of the dried precipitate at Step 4? Include a chemical equation in your answer.

$$\text{mass of ppt} = \frac{4.25}{100} \times 35$$

$$= 1.4875 \text{ g}$$