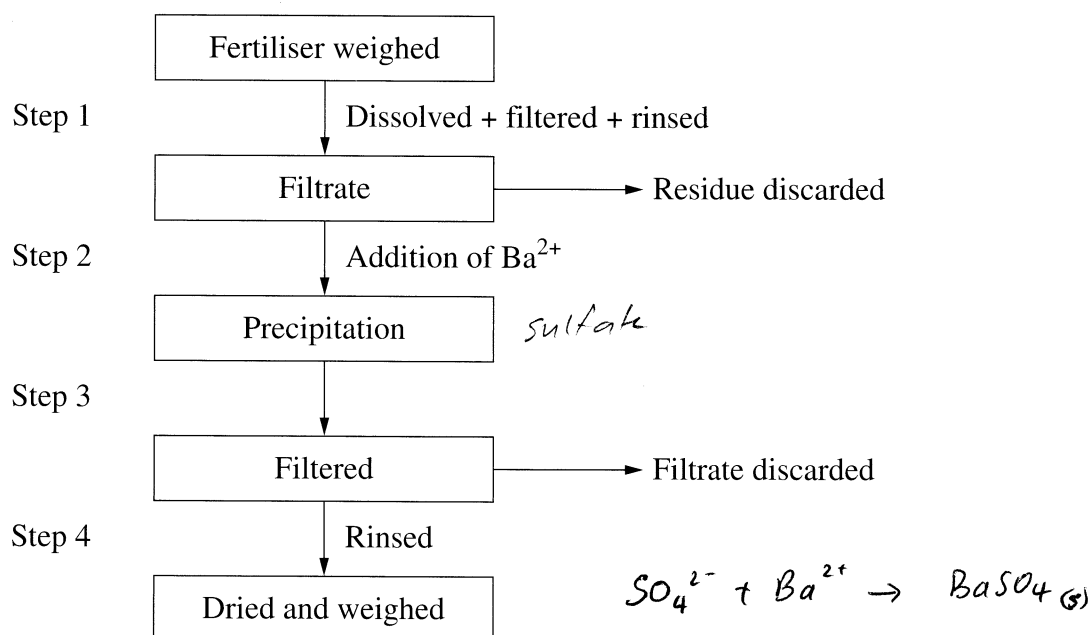


Question 29 (6 marks)

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

Assumptions that were made is that the dissolved substance in step ① is only sulfate ions, and that all sulfate ions precipitated with the Barium ion. These assumptions \therefore means the results are not accurate, and the validity is not correct as the outcomes are not only the amount of sulfate present in the sample of lawn fertiliser.

- (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.

