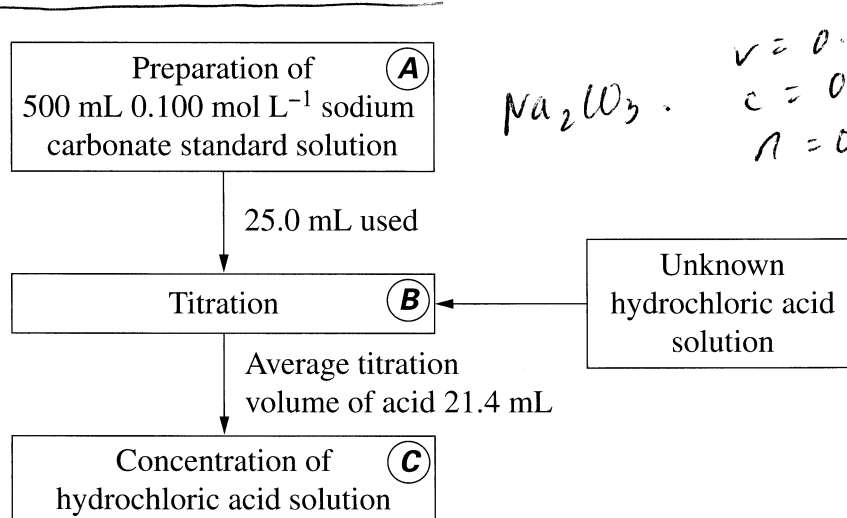


Question 28 (8 marks)

The flowchart shown outlines the sequence of steps used to determine the concentration of an unknown hydrochloric acid solution.

8



Describe steps **A**, **B** and **C** including correct techniques, equipment and appropriate calculations. Determine the concentration of the hydrochloric acid.

Step A - Preparation of Standard solution.

- ① Measure approximately 5.30 g of powder sodium carbonate on electronic balance in a 250 ml beaker. Tare the electronic balance ~~before~~ with beaker on before placing Na_2CO_3 .
- ② Dissolve sodium carbonate in small amount of distilled water and stir with a spatula.
- ③ Collect a ~~measuring cylinder~~ ^{round flask} and funnel, and add the sodium carbonate solution into the round flask. Wash the beaker into the flask.

Question 28 continues on page 18