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Titration/volumetric analysis - KCSE Chemistry Paper 3 - Practicals

Titration is determining the end point of the burette contents that react with fixed (usually 25.0cm^3 from a pipette) conical flask contents.

As evidence of a titration actually done examining body require the candidate to record their burette readings before and after the titration.

For KCSE candidates burette readings must be recorded in a titration table in the format provided by the Kenya National Examination Council.

As evidence of all titration actually done Kenya National Examination Council require the candidate to record their burette readings before and after the titration to complete the titration table in the format provided.

Sample Titration table format

Final burette reading (cm^3)	24.0	24.0	24.0
Initial burette reading (cm^3)	0.0	0.0	0.0
Volume of solution used (cm^3)	24.0	24.0	24.0

Calculate the average volume of solution used

$$\frac{24.0 + 24.0 + 24.0}{3} = 24.0\ cm^3$$

As evidence of understanding the degree of accuracy of burettes, all readings must be recorded to a decimal point.

As evidence of accuracy in carrying the out the titration, candidates value should be within 0.2 of the school value.

The school value is the teachers readings presented to the examining body/council based on the concentrations of the solutions s/he presented to her/his candidates.

Bonus mark is awarded for averaged reading within 0.1 school value as Final accuracy.

Calculations involved after the titration require candidates thorough practice mastery on the:

i. relationship among the mole, molar mass, mole ratios, concentration, molarity.
ii. mathematical application of 1^{st} principles.

Very useful information which candidates forget appear usually in the beginning of the paper as:

"You are provided with..."

All calculation must be to the 4th decimal point unless they divide fully to a lesser decimal point.

Never round off answers.