

Experiment



A2-1

English (Official)

Determination of the Glucose Content of Date Syrup Sample (8 Marks)

2.1 (3.0 pt) Observation Table 1

Sr.		Titration		
		I	II	III
1	Initial burette reading mL	0.0	0.0	0.0
2	Final burette reading mL	10.0	10.0	10.0
3	Difference in burette readings mL	10.0	10.0	10.0

Constant Burette reading = 10.0 mL

2.2 (0.5 pt)

Molarity of Iodine solution = $\frac{0.05}{0.049} / 0.057$ M

2.3 (3.0 pt) Observation Table 2

Sr.		Titration		
		I	II	III
1.	Initial titration reading mL	0.0	0.0	0.0
2	Final Titration reading mL	4.0	4.0	4.0
3	Difference in burette readings mL	4.0	4.0	4.0

Constant burette reading = 4.0 mL

*2

*1 5% deviation 9.5 to 10.5 (2.5 marks)
 10% deviation 9 to 11 (1.5 marks)
 11-15% deviation 8.5 to 11.5 (0.5 marks)

*2 5% deviation 3.8 to 4.2 (3 marks)
 10% deviation 3.6 to 4.4 (2 marks)
 11-15% deviation 3.4 to 4.6 (1 mark)

Experiment



A2-2

English (Official)

Since no carry over error, for this page any solution is considered correct as long as they give titration data.

2.4 (1.5 pt)
Calculations

1. Determine the amount of Glucose in the given sample of Date syrup. (in moles) - 0.5 mark

$$3 \times 10^{-3} \text{ moles}$$

2. Mass of glucose in given sample (0.5 mark)

$$0.54 \text{ g}$$

3. Determine the percentage of Glucose in the given sample of Date syrup. (0.5 mark)

$$54\%$$

Results:

1. Amount of Glucose in the given sample of Date syrup =^{0.54}.....g

2. Percentage of Glucose in the given sample of Date syrup =^{54%}.....%