

**SERIES 36 EXAMS**

**CHEMISTRY PP 233/3**

**MARKING SCHEME**

- 1(a) CT - 1 - table completed with realistic temperature readings  
 D.P - 1- 1 or 0 dips consistently used.  
 A - 1 1<sup>st</sup> reading => 2 of s  
 T 1 temperature increases then decreases.
- (i) Plotting - 1  
 Scale - ½ plots cover at least half of the grid provided  
 Axes – ½ both axes correctly labeled.

Or

(ii) Peak temperature - temperature at O = ans (ii)

(iii)  $40\text{cm}^3 \times 1.0\text{gcm}^{-3} \times 4.2 \times \text{DT} = \text{ans (a) (iii)}$

(b) CT - 1

D.P - 1

A - 1

P.A - 1

F.A - 1

(c)(i)  $\frac{25}{100} \times 0.3 = 0.0075$

100

$\frac{0.0075}{2} = 0.00375$

2

(ii)  $\frac{250 \times 0.000375}{\text{Average volume}} = \text{ans c (ii)}$

Average volume

(iii)  $\frac{40}{1000} \times 0.5 = 0.02$

(d) 0.02 - ans c (ii) = ans (d)

(e)  $\frac{1}{\text{Ans (d)}} \times \text{ans a (iii)}$

Ans (d)

DH = ans

2(a)

OBSERVATION	INFERENCES
(a)(i) Effervescence/bubbles produced white ppt formed	$\text{CO}_3^{2-}$
(b)(i) Blue pp that does not dissolve in excess	$\text{Cu}^{24}$
(ii) Blue ppt that dissolve in excess to form deep blue solution	$\text{Cu}^{24}$
(ii) Brown solid deposited	$\text{Cu}^{24}$
(a) Burn with yellow sooty flame	-C = C- or > C = CT
(b) Turns from orange to green	>C- CT, -C = C- , -OH
(ii) Turns from orange to red	Acid solution
(iii) Effervescence /bubbles	$\text{H}^+$

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