

SERIES 32 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 1st 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) $\frac{25}{100} \times 0.3 = 0.0075$

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

(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	CO_3^{2-}
(b)(i) Blue ppt that does not dissolve in excess	Cu^{24}
(ii) Blue ppt that dissolve in excess to form deep blue solution	Cu^{24}
(ii) Brown solid deposited	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	H ⁺

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