

Acids, Bases and Salts

Mark Scheme 7

Level	IGCSE
Subject	Chemistry
Exam Board	CIE
Topic	Acids, Bases and Salts
Sub-Topic	
Paper Type	Alternative to Practical
Booklet	Mark Scheme 7

Time Allowed: 53 minutes

Score: /44

Percentage: /100

- 1 (a) straight line (1) DRAWN WITH A RULER [1]
- (b) inaccurate point is at pH 5 (1) not on line (1) [2]
- (c) % corrosion decreases as pH increases (1) [1]
-
- 2 (a) boxes filled in correctly to show:
measuring cylinder (1)
spatula (1)
beaker (1) [3]
- (b) blue [1]
- (c) heat (1)
to crystallising point (1) [2]

3	(a)	soil sample + water (1)		
		stir/heat (1)		
		filter (1)		
		add Universal Indicator (1)		
		chart (1)		[5]
	(b)	more samples (1)		
		different parts of field (1)		[2]
4	(a)	A Funnel	1	
		B Flask	1	
		C (Teat) Pipette/dropper	1	[3]
	(b)	Increase surface area	1	
		Reference to rate/efficiency/easily	1	[2]
	(c)	pH may be different/vary at different places/fair test	1	[1]
	(d)	Reference to plants/crops growth	1	
		No plants	0	[1]

5	(a)	<u>A</u>	- spatula	only	(1)	
		<u>B</u>	- beaker	only	(1)	
		<u>C</u>	- <u>funnel</u>	(1) <u>not</u> filter		3
	(b)		more than enough	to react	(1)	1
			/residue			
	(c)	6-7	(1)			1

Question	Answer	Marks	Guidance
6(a)	(te pipette; <u>evaporating</u> dish/basin;	1 1	R: watch glass/clock glass/crucible/petri dish
6(b)(i)	(metal) with high melting point;	1 1	
6(b)(ii)		1	
6(c)(i)	> 7 / purple / blue / dark green;	1	
6(c)(ii)	/ white / white precipitate / cloudy;	1	

7 Tests on solid **T**

(b) (ii) white (1) precipitate (1) insoluble in excess (1) [2]

(iii) no/slight (1) precipitate (1) max 4 for **(ii)** and **(iii)** [2]
no reaction (1) only

(e) weak (1) acids (1) [2]

(f) copper present(1) ethanoic acid/organic salt (1) [2]

[Total: 8]