# Acids, Bases and Salts

## Mark Scheme 7

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<th>Level</th>
<th>IGCSE</th>
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<td>Subject</td>
<td>Chemistry</td>
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**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)

(b) more samples (1)
    different parts of field (1)

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) A - spatula only (1)
(b) B - beaker only (1)
(c) C - funnel (1) not filter
(b) more than enough to react (1)
(c) 6-7 (1)

3
1
1
<table>
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<tr>
<th>Question</th>
<th>Answer</th>
<th>Marks</th>
<th>Guidance</th>
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<tr>
<td>6(a)</td>
<td>(te pipette; evaporating dish/basin;)</td>
<td>1</td>
<td>R: watch glass/clock glass/crucible/petri dish</td>
</tr>
<tr>
<td>6(b)(i)</td>
<td>(metal) with high melting point;</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6(b)(ii)</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6(c)(i)</td>
<td>&gt; 7/purple/blue/dark green;</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6(c)(ii)</td>
<td>/white/white precipitate/cloudy;</td>
<td>1</td>
<td></td>
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</tbody>
</table>
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)
      no reaction (1) only [2]

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

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

[Total: 8]