

Acids, bases and combustion

1. a) B
b) PH of potassium hydroxide is higher than that of aqueous ammonia. KOH ions are dissociated more than that of aqueous NH₃
2. (a) (i) X
(ii) W P 1
(b) W P 1
3. a) Methyl Orange Red/Pink P 1/2
Phenolphthalein Colourless/Pink P 1/2
b) The PH of 0.1M KOH is higher than of 0.1M aqueous ammonia P 1
KOH is strongly dissociated in solution. P 1
4. a) K
b) i) G
ii) I
5. Copper (II) oxide is insoluble in water hence there are no OH- ions in the mixture
6. a) S is acidic and would make the situation worse O 1/2
b) Discovery of drugs processing and testing is the work of chemists. Chemists are professionals who have studied chemistry O 1/2
7. Its due to formation of insoluble Lead(II) carbonate hence preventing any further reaction.
8. CaO is used in correcting soil acidity. ✓
9. (a) Pink P 1
(b) 7.0 P 1
10. (a) alkali is soluble base. ✓
(b) Because it is lighter than air. ✓
11. (a)

Solution	Blue litmus paper	Indicator W
	BLUE	
	...RED.....	
- (b) Phenolphthalein
12. a)-give inconsistent results ✓ 1/2
-expire shortly ✓ 1/2
b) I.

Solvent forms

Baseline (origin)

II. Maximum sports-award 1 ½ mks

Fail any one- award

III W√ ½ and Y√ ½

13. *Sting of a bee is acidic √¹ and is neutralized by sodium hydrogen carbonate√² into a salt, carbon (IV) oxide and water. This gives pain relief. √²*
14. *(a) There was production of effervescence . The lemon juice contain an acid that reacts with the carbonate to produce carbon (IV) oxide.*
(b) No production of bubbles. Copper is below hydrogen in the reactivity
15. *(a) Yellow*

P ½

16. *Colourless*
(i) *K and M*
(ii) *K and M_P*

P 1