



**Science Revised Syllabus  
Junior Certificate  
Higher Level**

**Past Exam Questions on  
C Acids and Bases**

**Q4 Part (a) 2013**

(a) The pH scale is used to measure the acidity and the alkalinity of substances.

(i) Give the range of pH for acids. \_\_\_\_\_

(ii) Give the range of pH for bases. \_\_\_\_\_

**Q4 Part (f) 2012**

(f) Select a substance from the list with a pH less than 7 and one with a pH greater than 7: orange juice, rain water, toothpaste, bread soda, vinegar, sour milk, milk of magnesia, cola, washing soda.

pH less than 7 \_\_\_\_\_

pH greater than 7 \_\_\_\_\_

**Q4 Part (b) 2011**

(b) Describe how to measure the pH of lemon juice.

Describe \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Q4 Part (b) 2010**

(b) What *effect* has acid rain on limestone? Explain this *effect*.

What? \_\_\_\_\_

Explain \_\_\_\_\_

**Q4 Part (f) & (g) 2009**

- (f) (i) What is *item A* used for in the titration of an acid with a base?

What? \_\_\_\_\_  
\_\_\_\_\_

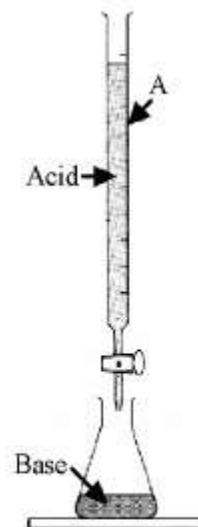
- (ii) What *happens* when an acid reacts with a base?

What? \_\_\_\_\_  
\_\_\_\_\_

- (g) Give *two uses* of carbon dioxide.

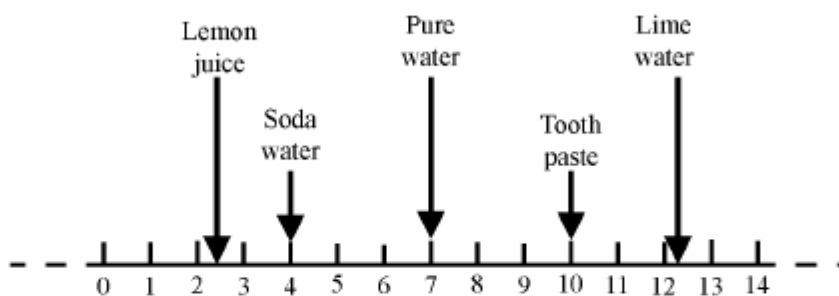
Use one \_\_\_\_\_

Use two \_\_\_\_\_



**Q6 Part (b) 2008**

- (b) The diagram shows the *positions* of some common substances on the *pH scale*.



- (i) Classify the *substances* shown as *acidic, basic or neutral*. (9)

Acidic \_\_\_\_\_

Basic \_\_\_\_\_

Neutral \_\_\_\_\_

**Q4 Part (g) 2007**

- (g) Give the *formula* of a common base.

Formula \_\_\_\_\_

Alkalis are water-soluble bases. Name a substance, which is *alkaline*.

Name \_\_\_\_\_

**Q5 Part (c) 2007**

- (c) Describe how to *investigate the pH* of everyday substances e.g. antacid (indigestion powder), lemon juice, oven cleaner, vinegar etc. (6)

Description \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name an everyday substance with a *pH of less than 7*. (3)

Name \_\_\_\_\_

**Q5 Part (a) 2006**

(a) The pieces of laboratory equipment shown, together with some other items, were used to *prepare a sample of sodium chloride*.

(i) Name item A *or* item B (3)

A \_\_\_\_\_ *or* B \_\_\_\_\_

(ii) There were 25 cm<sup>3</sup> volumes of base used in this experiment. Describe how the piece of equipment A was used to *measure the volume of acid* required to neutralise this amount of base. (6)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(iii) Name a *suitable acid* and name a *suitable base* for the preparation of sodium chloride by this method. (6)

Acid \_\_\_\_\_ Base \_\_\_\_\_

(iv) Write a *chemical equation* for the reaction between the *acid* and the *base* that you have named. (6)

\_\_\_\_\_

