# EXERCISE # 1

**(A). Answer the following in not more than 20 words.**

**Q.1** Classify the following substances into acidic and basic substances.

Tomato juice, soap solution, toothpaste, lemon juice, vinegar

**Q.2** Name three mineral acids and give their formulae.

**Q.3** Define acids

**Q.4** Define bases

**Q.5** What are soluble bases called ? Give two examples.

**Q.6** Define neutral substances.

**(B). Answer the following in not more than 40 words.**

**Q.1** Name an acidic gas which is discharged into the atmosphere on the burning of fuels like coal and natural gas. How is this gas formed ?

**Q.2** What are the general properties of basic substances ?

**(C). Answer the following in not more than 100 words.**

**Q.1** Write the properties of an acid

**Q.2** Describe an activity to show the effect of an acid on carbonates and hydrogen carbonates

**Q.3** What is acid rain ? How is it formed ? Mention three bad effects of acid rain.

**Q.4** Write a note on the uses of bases.

**(D). Complete the following.**

**Q.1** The sour things we eat contain…..

**Q.2** Ammonium hydroxide is an…..

**Q.3** An acid is……by a base

**Q.4** An antacid generally containsa……

**Q.5**

| Indicator | Colour | |
|---|---|---|
| | **Acidic medium** | **Basic medium** |
| Litmus | Red | …… |
| …… | Colour less | Red |
| ……juice | Yellow | Red-brown |
| Red-cabbage juice | …… | Green |
| China-rose juice | Red | …… |

# EXERCISE # 2

**(A). Choose the correct option.**

**Q.1** Acids are formed when
(a) metals combine with oxygen
(b) oxides of nonmetals dissolve in water
(c) metals react with water
(d) bases dissolve in water

**Q.2** Hydrochloric acid can be neutralised by
(a) nitric acid (b) sulphuric acid
(c) citric acid (d) sodium hydroxide

**Q.3** A soap solution is
(a) acidic (b) alkaline
(c) neutral (d) None

**Q.4** In a neutralisation reaction, an acid reacts with a base to give
(a) another acid
(b) another base
(c) another acid and another base
(d) a salt and water

**(B)** Match the columns A and B

**1.**

| | A | | B |
|---|---|---|---|
| (a) | Hydrochloride acid | (i) | In storage batteries |
| (b) | Ascorbic acid | (ii) | Found in yoghurt |
| (c) | Sulphuric acid | (iii) | In making vinegar |
| (d) | Lactic acid | (iv) | As bathroom acid |
| (e) | Acetic acid | (v) | Vitamin C |

**2.**

| | A | | B |
|---|---|---|---|
| (a) | Sodium iodate | (i) | A food preservative |
| (b) | Calcium sulphate | (ii) | Used as a fertiliser |
| (c) | Bleaching powder | (iii) | Present in plaster of Paris |
| (d) | Ammonium sulphate | (iv) | A disinfectant |
| (e) | Sodium benzoate | (v) | A supplement to common salt |

**(C). Tick the correct box.**

| | | |
|---|---|---|
| **1** | **Yes** | **No** |
| **2** | **Yes** | **No** |
| **3** | **Yes** | **No** |
| **4** | **Yes** | **No** |
| **5** | **Yes** | **No** |

**Q.1** Are most salts neutral ?

**Q.2** Are soluble bases called alkalis ?

**Q.3** Calcium carbonate when heated gives calcium oxide, which is a base. Will the same base be formed when calcium chloride is heated ?

**Q.4** Lemon juice gives carbon dioxide with baking soda. Will it give carbon dioxide with marble too ?

**Q.5** Carbon when burnt in air gives an acidic gas. Does sulphur when burnt in air give and an acidic gas ?