

CLASS X CHEMISTRY ASSIGNMENT

ACIDS, BASES AND SALTS

Q1 Why does the flow of acid rain water into a river make the survival of aquatic life in the river difficult?

Q2 Why should water be never added dropwise to concentrated sulphuric acid?

Q3 Write balanced chemical equations for the reactions taking place when dry blue crystals of copper sulphate are dropped into concentrated sulphuric acid.

Q4 What is the role of tartaric acid in baking powder?

Q5 There are two jars A and B containing food materials. Food in jar A is pickled with acetic acid while B is not. Food of which jar will stale first?

Q6 If soil is acidic which compound would you spread to treat the soil?

Q7 Write two observations you make when quick lime is added to water.

Q8 A calcium compound which is yellow white powder is used as disinfectant and also in textile industry. Name the compound. Which gas is released when this compound is left exposed in air?

Q9 State the chemical property in each case on which the following uses of baking soda are based

(i) **As an antacid**

(ii) **As a constituent of baking powder**

Q10 How is chlorine of lime is chemically different from calcium chloride?

Q11 Name the acids present in the following foodstuffs which attribute to a sour taste to them

(a) **Lemon juice**

(b) **Vinegar**

(c) **Vitamin C tablet**

(d) **Tamarind**

(e) **Sour milk**

Q12 What does pH stand for? What does pH scale indicate?

Q13 Sweet tooth may lead to tooth decay. Explain, why? What is the role of tooth paste in preventing cavities

Q14 Write the names of five hydrated salts with their colours and formulae.

Q15 How are bases different from alkalis? Are all bases alkalies?

Q16 What are strong acids and weak acids? Give two examples.

Q17 How will you test a gas which is liberated when hydrochloric acid reacts with an active metal?

Q18 Indicate with the help of a diagram the variation of pH with change in concentration of hydrogen

ion and hydroxide ions showing

(i) **Increase of acidic and basic nature.**

(ii) **Increase and decrease of H ion**

Q19 What are indicators? Give examples and their colour changes in different medium.

Q20 How will you prepare 100 times dilute solution from 1mL of concentrated sulphuric acid solution? What precaution would you suggest and why?

Q21. Name the products of Chlor Alkali process and mention one use of each of them.

Q22. Mention the common and chemical names of the following:

- a. NaHCO_3
- b. Na_2CO_3
- c. CaOCl_2

Q23. Write the preparation and uses of P.O.P

Q24. Give reasons for the following:

- a. All the acids and bases are conductors.
- b. Vanilla is known as an olfactory indicator.
- c. pH of milk change when it turns into curd.
- d. NaHCO_3 is used in soda-acid fire extinguisher.

