

ROYAL PUBLIC SCHOOL

SECTOR – IV / B.S.CITY / SESSION 2016 -17

ASSIGNMENT WORK

Class – VII

Sub – Science

Topic – 4.ACIDS, BASES AND SALTS

MULTIPLE CHOICE QUESTIONS

- Which of the following substances turn blue litmus red?
a. Basic b. acidic c. neutral d. all of these
- Which of the following is a property of an acid?
a. Sour taste b. sweet taste c. bitter taste d. salty taste
- Milk of magnesia contains hydroxide.
a. Sodium b. potassium c. magnesium d. ammonium
- Manure is added, when the soil is too
a. Acidic b. basic c. neutral d. polluted
- Baking soda solution turns pink china rose indicator green, it is solution.
a. An acidic b. a basic c. a neutral d. mineral
- The taste of acid is –
a. Sweet b. bitter c. salty d. none of these
- Acids turn litmus paper to
a. Blue, red b. pink, orange c. red, blue d. orange, pink
- produce hydroxyl ions in water.
a. Alkalies b. bases c. acids d. salts
- Which of the following is used for acidity?
a. Antibiotic b. antiseptic c. antacid d. analgesic
- Which of the following is not an indicator?
a. turmeric b. lemon c. china rose d. beet
- Sodium bicarbonate is commonly called.....
a. Baking soda b. washing soda c. slaked lime d. lime water
- Which of the elements is a constituent of organic acids?
a. Nitrogen b. oxygen c. carbon d. all of these
- Sulphuric acid is-
a. Strong acid b. Inorganic acid c. mineral acid d. all of these
- Which of the following is not a strong acid?
a. Hydrochloric acid b. nitric acid c. acetic acid d. sulphuric acid
- Which of the following bases is used as an antacid to neutralize stomach acidity?
a. Sodium hydroxide b. calcium hydroxide c. magnesium hydroxide
- The acid produced when sulphur dioxide is passed through water
a. Hydrochloric acid b. sulphurous acid c. sulphuric acid
- Which of the following is not a base?
a. Sodium hydroxide b. potassium hydroxide c. zinc chloride
- The gas evolved when metals react with an acid is
a. Oxygen b. hydrogen c. carbon dioxide
- Acids which accrue naturally in fruits and vegetables are called
a. Mineral acids b. inorganic acids c. organic acids

STATE TRUE OR FALSE.

- Alkalies are sour to taste.
- Mineral acids change to organic acids on addition of water.
- Acidity of a base is the total number of hydrogen atoms present in one molecule of the base.
- Sodium carbonate is also called limestone.
- The salt formed by the neutralization of NaOH with HCl is basic in nature.
- Acids obtained from tomato, unripe mango and tamarind are mineral acids.
- Any concentrated acid can be diluted by adding water to it.
- The acid used in 'soda' or fizzy soft drinks is carbonic acid.
- When acids react with metals, the hydrogen of the acid is replaced by the metal.

10. Carbonic acid does not react with metals.

11. Concentrated sulphuric and concentrated nitric acid are always kept in metallic containers.

MATCH THE FOLLOWING:

- Column A**
1. Tartaric acid
 2. Turmeric
 3. Neutralization reaction
 4. Quicklime
 5. Phenolphthalein indicator
 6. Calamine solution
 7. Organic acids
 8. Limestone
 9. Acetic acid
 10. Caustic soda
 11. Common salt
 12. Green vitriol
 13. Milk of magnesia
 14. Nitric acid
 15. Baking soda
 16. Chile salt petre

- Column B**
- a. zinc carbonate
 - b. calcium oxide
 - c. human – made indicator
 - d. natural acids
 - e. gives salt and water
 - f. natural indicator
 - g. sour taste
 - h. $Mg(OH)_2$
 - i. $NaHCO_3$
 - j. HNO_3
 - k. CH_3COOH
 - l. $NaNO_3$
 - m. $NaNO_3$
 - n. $NaCl$
 - o. $FeSO_4 \cdot 7H_2O$
 - p. $CaCO_3$

FILL IN THE BLANKS.

1. Turmeric turns in basic solution.
2. Mineral acids are highly in nature.
3. Phenolphthalein is a indicator.
4. Solution turns pink china rose indicator dark pink.
5. acid is present in vinegar.
6. An alkali is a Soluble in water.
7. Acid rain causes of buildings.
8. All Contain hydrogen atoms.
9. The basic substance used for white washing walls is
10. Turns red litmus blue.
11. Toothpastes contain
12. The pH of pure water is
13. Car batteries contain acid.
14. Acids have a taste.
15. Acids which are present in citrus fruits and sour curd belong to the group of acids.
16. When acid and base react together a new compound called is formed.
17. Mineral acids are obtained from
18. All acids contain

19. Metals on heating or burning produce of metals.

20. Turmeric is a Indicator.

VERY SHORT ANSWER QUESTIONS.

1. Which acid is produced in our stomach?
2. Name any two bases.
3. Give two examples each of natural and human-made indicator.
4. Give one example of mineral acid.
5. What is neutralization?
6. Why do we add lime to an acidic soil?
7. How will you treat a bee sting?
8. Define:
a. Alkalies b. indicators c. salt d. water of crystallization
9. Name an acid which is used as a bleaching agent in textile industry.
10. Name one substance that can be used to neutralise calcium hydroxide.
11. A colourless liquid reacts with zinc to produce hydrogen gas. It also turns blue litmus red. What can you say about the colourless liquid?
12. How does milk of magnesia help to relieve stomach pain due to acidity?
13. How does raw beetroot help to distinguish between acids and bases?

SHORT ANSWER QUESTIONS.

1. What are indicators?
2. How will you test whether a given solution is acidic, basic or neutral with a turmeric indicator?
3. Why is an antacid tablet taken when you suffer from acidity?
4. Why do curd, lemon juice and tamarind taste sour?
5. Why are mineral acids known as laboratory acids?
6. How does a litmus indicator work?
7. Give three examples each of mineral and natural acids. Mention the sources of natural acids.
8. Why should we treat factory wastes before discharging them into a river?
9. Annie is playing in her garden with her friend, Ishrat. Suddenly, a bee bites Ishrat. Annie immediately brings baking soda and rubs it on the stung area.
a. Why does Annie apply baking soda?
b. What value can you learn from Annie?
10. What is the difference between dilute and concentrated acid?
11. What is the difference between :
a. Acid and base
b. Weak acid and strong acid
c. Organic acid and mineral acid
d. Neutral salt and basic salt?
12. What are indicators? Give example of an indicator and write its effect on acid, base and water.
13. How are acid rains caused?

14. Why are factory wastes neutralized before they are disposed to water bodies?
15. How can anhydrous salt change into their hydrate forms?
16. Explain the effect of litmus paper on Na_2CO_3 and NaHCO_3 solutions.
17. How are acid burns treated?
18. Explain the reaction involved in the formation of sodium chloride.
19. Give two examples each of : (a) natural acids; (b) mineral acids; (c) strong bases; (d) weak bases; (e) strong acids; (f) weak acids;
20. What happens when acids react with metals?
21. Differentiate between the following giving examples:
 - a. Strong and weak acids
 - b. A base and an alkali
22. What are 'indicators'? describe what kind of changes take place when the following indicators are exposed to acids and bases:
 - a. Litmus solution
 - b. Methyl orange
 - c. phenolphthalein

LONG ANSWER QUESTIONS.

1. a. Define neutralization reaction.
b. What should be added in the soil when it is: (i) too acidic (ii) too basic? Discuss your answer.
c. What are organic acids? Give examples.
2. Differentiate between acids and bases.
3. What are inorganic acids? Give four general properties of such acids.
4. What is the source of litmus paper? Explain its use.
5. List four common properties of basic solutions.
6. A test tube contains a colourless liquid which is suspected to be either an acid or a base or water. How will you find out which compound it is?
7. Give examples of a common acid and a common salt, compare their composition. How do they differ and what do they have in common?
8. Give reasons by which you can differentiate hydrated salt from anhydrous salt.
9. Explain acidic, neutral and basic salts.
10. What is a 'neutralization' reaction? give examples.
11. What are 'natural indicators? Give examples.
12. Give two uses of each of the following:
 - a. Hydrochloric acid
 - b. Sodium hydroxide
13. What are neutral substances? Which of the following substances are neutral?
Hydrochloric acid, Lime water, petrol, oxygen, water, caustic soda.
