

CLASS X GUESS PAPER SCIENCE

MCQs : Acids, Bases and Salts

- Someone is suffering from a problem of acidity after overeating. Which of the following would you prefer as remedy for it –
c. Lemon juice. b. vinegar with water. c. baking soda solution. d. none of them.
- The nature of metallic oxide is -
a. acidic b. basic c. neutral d. none of them.
- The nature of nonmetallic oxide is –
a. acidic b. basic c. neutral d. none of them.
- Which of the following statement is incorrect–
a. Acids change the colour of blue litmus to red.
b. Bases change the colour of red litmus to blue.
c. Litmus solution is commonly used as an indicator.
d. Phenolphthalein and Vanilla are synthetic indicators.
- Which of the following statement is correct –
a. Acids are sour and change the colour of red litmus to blue.
b. Bases are bitter in taste and change the colour of blue litmus to red.
c. Strain of curry on a white cloth becomes reddish brown when soap is rubbed on it.
d. All of the above.
- Leaves of which flower are not used as indicator -
a. petunia b. hydrangea c. geranium, d. rose.
- When excess of carbon dioxide is passed through lime water which of the following is formed?
a. Lime stone b. quick lime c. calcium bicarbonate d. slaked lime
- Which of them is not an olfactory indicator?
a. vanilla, b. onion, c. cardamom, d. clove.
- Bubbles of which gas produce pop sound when introduced with burning matchstick?
a. oxygen, b. nitrogen, c. hydrogen, d. carbon dioxide.
- Which gas is produced when metal carbonate or metal bicarbonate reacts with dilute acid?
a. carbon dioxide, b. sulphur dioxide, c. nitrogen dioxide, d. hydrogen.
- When carbon dioxide is passed through lime water which of the following is formed.
a. Lime stone b. quick lime c. calcium bicarbonate d. slaked lime.
- The reaction between an acid and a base is called–

- a. Addition b. neutralisation c. decomposition d. none of them.
13. When copper oxide is dissolved in dilute hydrochloric solution, the colour of solution becomes –
a. Blue green b. blue c. reddish brown d. green.
14. Which of the following reacts with acids to give salt and water?
a. metallic oxides, b. nonmetallic oxides c. metals d. nonmetals.
15. The nature of sodium hydrogen carbonate is –
a. acidic b. basic c. neutral, d. none of them.
16. The nature of washing soda (sodium carbonate) is –
a. acidic, b. basic c. neutral, d. none of them.
17. The solution of which substance conducts electricity –
a. glucose b. alcohol c. sulphuric acid d. all of them.
18. The electric current is carried through the solution by –
a. ions b. atoms c. molecules d. compounds.
19. Which statement is correct for dry hydrogen chloride gas?
a. It changes the red litmus to blue.
b. It changes the blue litmus to red.
c. It neither changes red litmus to blue nor blue litmus to red
d. None of the above statement is correct.
20. Substance contained in guard tube (drying tube) to dry the HCl gas is –
a. Calcium chloride b. copper sulphate c. magnesium chloride d. iron sulphate.
21. Which of the following statements is incorrect –
a. The process of adding an acid into water is highly exothermic.
b. The process of adding a base into water is highly exothermic.
c. Heat is evolved when an acid or a base is added to water.
d. Heat is involved when an acid or a base is added to water.
22. What does 'p' in pH of a solution stands for -
a. Pure H^+ ions b. purity of H^+ ions c. power of H^+ ions d. none of them.
23. Which of them is incorrect –
a. The substances with pH value between 7 and 14 are basic in nature.
b. The substances with pH value between 0 and 7 are acidic in nature.
c. The substances with pH value 7 are neutral in nature.
d. All of them are incorrect.
24. The nature of substance with highest OH^- ion concentration is most –
a. acidic b. basic c. neutral d. none.
25. Which of the following is correct –
a. The solution with pH value 0 is most acidic in nature.
b. The solution with maximum H^+ ions concentration is acidic in nature.
c. The solution with pH value 14 is most basic in nature.
d. All of them are correct.
26. Which of the following is correct –

- a. Hydrochloric acid and acetic acid of same concentration produce different amounts of H^+ ions.
b. Acids that produce more H^+ ions are said to be strong acids.
c. Acids that produce less H^+ ions are said to be weak acids.
d. All of them are correct.
27. The atmosphere of planet Venus is made up of thick white and yellowish clouds of -
a. Sulphuric acid b. hydrochloric acid c. nitric acid d. all of them.
28. The acid present in the stinging hair of nettle leaves which causes burning pain is -
a. Lactic acid b. oxalic acid c. methanoic acid d. citric acid.
29. The leaves of which plant are used as the remedy of burning pain caused by nettle sting?
a. Neem plant b. duck plant c. dock plant d. babool plant
30. The nature of the plant used in the remedy of nettle sting is -
a. acidic b. basic c. neutral d. none of them.
31. The range of pH in which our body works is -
a. 7.0 - 7.8 b. 4.5 - 7.5 c. 5.7 - 7.8 d. 6.0 - 7.0
32. The pH of the water is -
a. Less than 3.6 b. more than 7 c. equal to 7 d. equal to 0
33. Tooth decay starts when the pH of the mouth is -
a. Less than 5.0 b. more than 5.0 c. less than 5.5 d. more than 5.5
34. Which of the following is a mild base?
a. Sodium hydroxide b. potassium hydroxide c. calcium hydroxide d. magnesium hydroxide
35. The acid secreted inside our body is -
a. hydrochloric acid b. nitric acid c. sulphuric acid d. acetic acid.
36. NaCl, KCl, $CaCl_2$, etc belong to the family of which salt?
a. Sodium salts b. potassium salts c. calcium salts d. chloride salts.
37. The nature of common salt (table salt) whose formula is NaCl is -
a. acidic b. basic c. neutral d. none of the above.
38. Which of the following is used as a raw material for substances like bleaching powder, washing soda?
a. Sodium chloride b. sodium hydroxide c. baking soda d. potassium chloride.
39. Which acid is present in baking powder -
a. citric acid b. lactic acid c. acetic acid d. hydrochloric acid.
40. Which of the following is an ingredient in antacids?
a. Baking powder b. baking soda c. washing powder d. sodium carbonate.
41. The pH of a solution which turns red litmus blue is likely to be -
a. 3 b. 5 c. 7 d. 9.
42. Choose the correct answer.
a. Nitric acid changes the colour of blue litmus to red.
b. Soap changes the colour of curry stain on white cloth to yellow.
c. Milk of magnesia has no effect on litmus solution.
d. Acetic acid changes the colour of red litmus to blue.
43. The gas obtained by the action of zinc on dilute hydrochloric acid -

