Acids, Bases and Salts

Question 1.
When CO_2 gas is passed through limewater, it turns milky. Which of the following compounds is responsible for this milkiness ?
(a) Calcium oxide
(b) Calcium chloride
(c) sodium carbonate
(d) Calcium carbonate

▼ Answer

(d) Calcium carbonate
Calcium carbonate is responsible for this milkiness.

Question 2.
Which of the following ion is responsible for the acidic nature of hydrochloric acid ?
(a) Hydrogen ion
(b) Hydroxide ion
(c) Chloride ion
(d) Hydrochloride ion

▼ Answer

(a) Hydrogen ion
Hydrogen ion is responsible for the acidic nature of hydrochloric acid.

Question 3.
Distilled water is:
(a) acidic
(b) basic
(c) neutral
(d) none of these

▼ Answer

(c) neutral
Distilled water is neutral.

Question 4.
Ammonia that turns red litmus blue is:
(a) acidic
(b) basic
(c) neutral
(d) none of these

▼ Answer

(b) basic
Ammonia is basic.

Question 5.
An antacid tablet is given to a person when he suffers from:
(a) obesity
(b) acidity
(c) dog bite
(d) none of these

▼ Answer

(b) acidity
An antacid is a tablet of curing acidity.

Question 6.
Ant’s bite injects:
(a) acetic acid
(b) formic acid
(c) hydrochloric acid
(d) none of these

▼ Answer

(b) formic acid
Ant’s bites injects formic acid.

Question 7.
The acid that our stomach releases is:
(a) sulphuric acid
(b) nitric acid
(c) hydrochloric acid
(d) formic acid

▼ Answer

(c) hydrochloric acid
Our stomach releases hydrochloric acid (HCl).

Question 8.
Neutralisation reaction is the reaction between:
(a) acid and base
(b) salt and water
(c) base and salt
(d) acid and salt

▼ Answer

(a) acid and base
Neturalisation reaction is between acid and base.

Question 9.
When the soil is too acidic, it is treated with:
(a) salt
(b) water
(c) base
(d) acid

▼ Answer

(c) base
If the soil is acidic, it is treated with base.

Question 10.
Quick lime is used in soil when the soil is:
(a) basic
(b) acidic
(c) salty
(d) neutral

▼ Answer

(b) acidic
If the soil is acidic quick lime is used in soil.

Question 11.
If the soil is too basic, it is treated with:
(a) quicklime
(b) salt
(c) organic matter
(d) water

▼ Answer

(c) organic matter
The soil is basic so it is treated with organic matter.

Question 12.
The factory waste are neutralised by adding:
(a) acidic substances
(b) salts
(c) basic substances
(d) water

▼ Answer

(c) basic substances
The factory waste are neutralised by basic substances.

Question 13.
Soap is:
(a) acidic
(b) basic
(c) neutral
(d) salt

▼ Answer

(b) basic
Soap is basic.

Question 14.
Litmus is a natural indicator which is extracted from:
(a) vinegar
(b) citrus fruits
(c) lichens
(d) spinach

▼ Answer

(c) lichens
Litmus is extracted from lichens.

Question 15.
The colour of litmus in distilled water is:
(a) red
(b) green
(c) blue
(d) purple

▼ Answer

(d) purple
The colour of litmus in distilled water is purple.

Question 16.
Tartaric acid is found in:
(a) vinegar
(b) curd
(c) amla
(d) tamarind

▼ Answer

(d) tamarind
Tartaric acid is found in tamarind.

Question 17.
Calcium hydroxide is found in:

(a) soap
(b) lime water
(c) vinegar
(d) milk of magnesia

▼ Answer

(b) lime water
Calcium hydroxide is found in lime water.

Question 18.
Citric acid is found in:
(a) fruits
(b) vegetables
(c) citrus fruits
(d) all of these

▼ Answer

(c) citrus fruits
Citric acid is found in citrus fruits.

Question 19.
Blue litmus paper is dipped in a solution. It remains blue. What is the nature of solution ?
(a) Acid and base
(b) Base and neutral
(c) Acid apd neutral
(d) None of these

▼ Answer

(b) Base and neutral
The nature of solution is base and neutral.

Question 20.
What will the effect on turmeric with common salt ?
(a) Turns red
(b) No effect
(c) Turns blue
(d) Turns green

▼ Answer

(a) Turns red
The effect on turmeric with common salt turns red.

Question 21.
Ascorlic acid is found in:
(a) citrus fruits
(b) fruits

(c) curd
(d) spinach

▼ Answer

(a) citrus fruits
Ascorbic acid is found in citrus fruits.

Question 22.
Magnesium hydroxide is found in:
(a) soap
(b) lime water
(c) milk of magnesia
(d) vegetable

▼ Answer

(c) milk of magnesia
Magnesium hydroxide is found in milk of magnesia.

Question 23.
Which of the following turns red litmus blue ?
(a) Bases
(b) Acids
(c) Salts
(d) None of these

▼ Answer

(a) Bases
Base turns red litmus blue.

Question 24.
Which of the following turns blue litmus red ?
(a) Bases
(b) Acids
(c) Salts
(d) None of these

▼ Answer

(b) Acids
Acids turn blue litmus red.

Question 25.
Which of the following substances makes the fruits sound.
(a) Acids
(b) Salts
(c) Bases
(d) None of these

▼ Answer

(a) Acids
Acids make the fruit sour.

Question 26.
The products of neutralisation reactions are:
(a) salt and water
(b) acid and base
(c) base and salt
(d) acid and water

▼ Answer

(a) salt and water
In neutralisation reaction acid and base react to give salt and water.

Question 27.
Which of the following is not an indicator ?
(a) Litmus
(b) Phenolphthalein
(c) Turmeric
(d) None of these

▼ Answer

(d) None of these
All these are indicators.

Question 28.
Which of the following turns pink solution of a phenolphthalein into a colourless solution ?
(a) Bases
(b) Acids
(c) Salt
(d) None of these

▼ Answer

(b) Acids
Acids turn pink solution of phenolphthalein into a colourless solution.

Question 29.
Which of the following turns colourless solution of phenol¬phthalein into pink solution ?
(a) Salt
(b) Base
(c) Acid
(d) All of these

▼ Answer

(b) Base
Base turns colourless solution of phenolphthalein into pink solution.

Question 30.
Acids and bases react to produce:
(a) salt and acid
(b) salt and water
(c) salt and hydrogen gas
(d) none of these

▼ Answer

(b) salt and water
Acid and bases react to produce salt and water.

Question 31.
When a particular quantity of hydrochloric acid solution is mixed with a particular quantity of sodium hydroxide solution one gets a:
(a) basic solution
(b) acidic solution
(c) neutral solution
(d) none of these

▼ Answer

(c) neutral solution
Acid and base react to give neutral solution.

Question 32.
In neutralisation reaction:
(a) heat is absorbed
(b) heat is evolved
(c) neither heat is absorbed nor evolved
(d) none of these

▼ Answer

(b) heat is evolved
In neutralisation reaction heat is evolved.

Question 33.
Acids are in taste.
(a) sour
(b) sweet
(c) bitter
(d) salty

▼ Answer

(a) sour
Acids are sour in taste.

Question 34.
Taste of base is:
(a) sour
(b) salty
(c) sweet
(d) bitter

▼ Answer

(d) bitter
Taste of base is bitter.

Question 35.
Which feels soapy on touch ?
(a) Acids
(b) Bases
(c) Both (a) and (b)
(d) None of these

▼ Answer

(b) Bases
Bases feel soapy on touch.

Question 36.
Which of the following are special type of substances that arc used to test whether a substance is acidic or basic ?
(a) Indicators
(b) Insulators
(c) Conductors
(d) None of these

▼ Answer

(b) Insulators
Indicators are used to show different types of colours in acidic or basic solutions.

Question 37.
The solutions which do not change the colour of either red or blue litmus are known as:
(a) acidic solution
(b) basic solution
(c) salty solution
(d) neutral solution

▼ Answer

(d) neutral solution
Neutral solution are neither acidic nor basic.

Question 38.
How will you classify the reaction between NaOH (aq) and HCl (aq)?
(a) Conbination
(b) Displacement
(c) Dissociation
(d) Neutralisation

▼ Answer

(d) Neutralisation
Neutralisation is the reaction between NaOH and HCl.

Match Column A with Column B:

Question 1.

Column-A	Column-B
(a) Acetic acid	(i) Spinach
(b) Formic acid	(ii) Citrus fruits
(c) Citric acid	(iii) Ant's sting
(d) Oxalic acid	(iv) Vinegar

▼ Answer

Column-A	Column-B
(a) Acetic acid	(iv) Vinegar
(b) Formic acid	(iii) Ant's sting
(c) Citric acid	(ii) Citrus fruits
(d) Oxalic acid	(i) Spinach

Question 2.

Column-A	Column-B
(a) Calcium hydroxide	(i) window cleaner
(b) Ammonium hydroxide	(ii) soap
(c) Sodium hydroxide	(iii) milk of magnesia
(d) Magnesium hydroxide	(iv) lime water

▼ Answer

Column-A	Column-B
(a) Calcium hydroxide	(iv) lime water
(b) Ammonium hydroxide	(i) window cleaner
(c) Sodium hydroxide	(ii) soap

(d) Magnesium hydroxide	(iii) milk of magnesia

Question 3.

Column-A	Column-B
(a) Acids turns	(i) Sour in taste
(b) Bases turns	(ii) Blue litmus
(c) Acid are	(iii) Bitter in taste
(d) Bases are	(iv) Red litmus blue

▼ Answer

Column-A	Column-B
(a) Acids turns	(ii) Blue litmus
(b) Bases turns	(iv) Red litmus blue
(c) Acid are	(i) Sour in taste
(d) Bases are	(iii) Bitter in taste

State whether the following statements are 'True' or 'False':

Question 1.
Curd, orange juice and vinegar are sour because they contain acids.

▼ Answer

True

Question 2.
Substances which are bitter in taste are known as acids.

▼ Answer

False

Question 3.
Nitric acid turns red litmus blue.

▼ Answer

False

Question 4.
Sodium hydroxide turns blue litmus red.

▼ Answer

False

Question 5.
Tooth decay is caused by the presence of a base.

▼ Answer

False

Question 6.
Indicator is a substance which shows different colours in acidic and basic solutions.

▼ Answer

True

Question 7.
Sodium hydroxide and hydrochloric acid neutralise each other and form salt and water.

▼ Answer

True

Question 8.
Lime water is found in tartaric acid.

▼ Answer

False

Question 9.
The reaction between on acid and base is known as neutralisation.

▼ Answer

True

Question 10.
An acid and a base neutralise each other and form a salt.

▼ Answer

True

Question 11.
The solutions which change the colour of either red or blue litmus are known as neutral solution.

▼ Answer

False

Question 12.
Distilled are is acids.

▼ Answer

False

Question 13.
The wastes of many factories contain acids.

▼ Answer

True

Question 14.
Organic matter releases gases which neutralises the basic nature of the soil.

▼ Answer

False

Question 15.
Our stomach contains hydrochloric acid.

▼ Answer

True

Question 16.
When an ant bites, it injects the ascorlic acid into the skin.

▼ Answer

False

Consider the following statements:

Question 1.
Both acids and bases change colour of all indicators.

▼ Answer

All four

Question 2.
If an indicator gives a colour change with an acid, it does not give a change with a base.

▼ Answer

(a) and (d)

Question 3.
If an indicator change colour with a base, it does not change colour with an acid.

▼ Answer

(b) and (c)

Question 4.
Change of colour in an acid and a base depends on the type of the indicator. Which of the statements are correct ?

▼ Answer

only

Fill in the blanks:

Question 1.
An ……. tablet is taken when you suffer from acidity.

▼ Answer

antacid

Question 2.
Calamine solution is applied on the skin when an ……. bites.

▼ Answer

ant

Question 3.
……. waste is neutralised before disposing it into the water bodies.

▼ Answer

Factory

Question 4.
Ammonia is found in household products, such as ……. cleaners.

▼ Answer

window

Question 5.
Acids are ……. in taste.

▼ Answer

sour

Question 6.
……. are bitter in taste and soapy to touch.

▼ Answer

Base

Question 7.
Substances which are neither acid nor basic are called ……..

▼ Answer

neutral

Question 8.
Solution of substances that show different colours in acidic basic and neutral solutions are called …….

▼ Answer

indicators

Question 9.
Excessive use of chemical fertilisers makes the ……. acidic.

▼ Answer

soil

Question 10.
The word acid comes from the Latin word ……. which means sour.

▼ Answer

acere

Question 11.
The chemical nature of such substances is ……..

▼ Answer

acidic

Question 12.
Lactic acid is found in ……..

▼ Answer

curd
