

CHEMISTRY

1). Solutions are classified into aqueous and non-aqueous solutions, based on .

- a) Nature of solute particles
- b) Nature of solvent
- c) Size of the particles
- d) Thickness of solvent

Answer is: b)

2). The solvent used to prepare aqueous solutions is .

- a) Water
- b) benzene
- c) kerosene
- d) petrol

Answer is: a)

3). A true solution does not show Tyndall effect, because of the .

- a) Nature of solvent
- b) Amount of solute
- c) Size of the particles
- d) Nature of solute

Answer is: c)

4). Tyndall effect is exhibited by .

- a) True solutions
- b) Suspensions
- c) Colloidal solutions
- d) Crystals

Answer is: c)

5). Tyndall effect is produced by .

- a) True solutions of light
- b) Scattering of light
- c) Refraction of light
- d) Movement of particles

Answer is: b)

6). The particle size in a colloidal solution is .

- a) $1 \text{ \AA} - 10 \text{ \AA}$
- b) $10 \text{ \AA} - 2000 \text{ \AA}$
- c) More than 2000 \AA
- d) Less than 1 \AA

Answer is: b)

7). The particle size in a suspension is .

- a) $1 \text{ \AA} - 10 \text{ \AA}$
- b) $10 \text{ \AA} - 2000 \text{ \AA}$
- c) More than 2000 \AA
- d) Less than 1 \AA

Answer is: c)

8). A solution which has more of solute, at a given temperature than that of saturated solution is called a .

- a) Super saturated solution
- b) Unsaturated solution
- c) Colloidal solution
- d) suspension

Answer is: a)

9). Chalk powder in water is an example of .

- a) Saturated solution
- b) Unsaturated solution
- c) suspension
- d) Colloidal solution

Answer is: c)

10). The particle size of the solute in true solution is .

- a) $1 \text{ \AA} - 10 \text{ \AA}$ b)
- $10 \text{ \AA} - 100 \text{ \AA}$
- c) $100 \text{ \AA} - 1000 \text{ \AA}$
- d) More than 1000 \AA

Answer is: a) 11).Milk
is a .

- a) True solution
- b) Colloidal solution
- c) suspension
- d) saturated solution

Answer is: b)

12).Nitrogen in soil is an example for .

- a) True solution
- b) saturated
- c) super saturated
- d) unsaturated

Answer is: b)

13).Fog is a solution of .

- a) Liquid in gas
- b) Gas in liquid
- c) Solid in gas
- d) Gas in gas

Answer is: a) 14).Soda water is a solution of .

- a) Liquid in gas
- b) Gas in liquid
- c) Solid in gas
- d) Gas in gas

Answer is:b

15).Blood is an example of .

- a) True solution
- b) Colloidal solution
- c) Saturated solution

d) Suspension

Answer is: b)

16).The dispersed phase in a colloidal solution is .

a) Solute

b) Solution

c) Suspension

d) Mixture

Answer is: a)

17).Sugar and Salt solutions are .

a) Heterogeneous mixtures

b) True solutions

c) Colloidal solutions

d) Suspensions

Answer is: b)

18).Brownian movement explains the property of colloidal solutions.

a) optical

b) electrical

c) kinetic

d) mechanical

Answer is: c)

19).In aqueous solutions, the solvent used is .

a) benzene

b) ether

c) alcohol

d) water

Answer is: d)

20).The solution in which saturation is not achieved is called .

a) Super saturated

b) Unsaturated

c) Saturated

d) Suspended

Answer is: b)

21).Cheese is a colloidal solution of .

a) Solid in solid

b) Liquid in solid

c) Solid in liquid

d) Gas in solid

Answer is: b)

22).Cork is a colloid of .

a) Solid in solid

b) Liquid in solid

c) Solid in liquid

d) Gas in solid

Answer is: d)

23).Smoke is a colloid of .

- a) Solid in solid
- b) Liquid in solid
- c) Solid in liquid
- d) Solid in Gas

Answer is:d)

24).The saturation temperature for 20.7g of CuSO_4 soluble in water is .

- a) 100C
- b) 1000C
- c) 200C
- d) 300C

Answeris:c)

25).The solubility level of an aqueous solution of NaCl at 250C is .

- a) 20g
- b) 36g
- c) 95g
- d) 8g

Answeris:b)

26).The increase in the solubility of Sodium halides, in water at 250C is /

- a) $\text{NaCl} > \text{NaBr} > \text{NaI}$
- b) $\text{NaBr} > \text{NaI} > \text{NaCl}$
- c) $\text{NaI} > \text{NaBr} > \text{NaCl}$
- d) $\text{NaCl} = \text{NaBr} > \text{NaI}$

Answer is:c)

27).Solubility of CaO in water is a .

- a) Chermic
- b) endothermic
- c) exothermic
- d) hypothermic

Answer is:c)

28).According to Henry's Law, in gases, an increase in pressure increase .

- a) Solubility
- b) saturation
- c) volume
- d) viscosity

Answeris:a)

29).Deep sea divers use mixture of .

- a) Helium - Oxygen
- b) Nitrogen - Oxygen
- c) Hydrogen - Nitrogen
- d) Helium - Nitrogen

Answer is:a)

30).The continuous random motion of colloidal particles is called .

- a) Brownian movement

- b) Zig zag movement
- c) Continuous movement
- d) Tyndall effect

Answer is: a)

31). On increasing the temperature, the solubility of the solute in the solvent .

- a) Increase
- b) Decrease
- c) Change
- d) Does not change

Answer is: a)

32). Which law relates solubility of solvents with pressure?

- a) Hess' law
- b) Henry's law
- c) Charles' Law
- d) Boyle's law

Answer is: b)

33). When sunlight passes through the window of your house, the dust particles scatter the light making the path of the light visible. This phenomenon is called as .

- a) Brownian motion
- b) Tyndall effect
- c) Raman effect
- d) Uniform motion

Answer is: b)

34). The Greek term 'atomos' means .

- a) divisible
- b) indivisible
- c) macro molecule
- d) soft sphere

Answer is: b)

35). Isotopes are the atoms of same element, with same atomic number. But with different.

- a) Atomic number
- b) Mass number
- c) Number of electrons
- d) Chemical nature

Answer is: b)

36). ${}^6\text{C}^{12}$ and ${}^6\text{C}^{14}$ are .

- a) Isotopes
- b) Isobars
- c) Isomers
- d) Molecules

Answer is: a)

37). Atoms of different elements possessing in the same atomic mass are called .

- a) Isotopes
- b) Isobars

- c) Isomers
- d) Molecules

Answer is: c)

38). Atoms of different elements with same number of neutrons.

- a) Isotopes
- b) Isomers
- c) Isobars
- d) Isotones

Answer is: d)

39). Atomicity of oxygen in ozone molecule is .

- a) 1
- b) 2
- c) 3
- d) 4

Answer is: c)

40). Atomicity of primary gases is .

- a) 1
- b) 2
- c) 3
- d) 4

Answer is: b)

41). In the Beginning of the 20th century, Matter Wave concept was introduced by

- a) Broglie
- b) Avogadro
- c) Heisenberg
- d) Einstein

Answer is: a)

42). The Principle of Uncertainty was introduced by .

- a) Broglie
- b) Avogadro
- c) Heisenberg
- d) Einstein

Answer is: c)

43). $^{18}\text{Ar}40$ and $^{20}\text{Ca}40$ are considered as .

- a) Isotopes
- b) Isomers
- c) Isobars
- d) Isotones

Answer is: a)

44). The compound which does not show simple ratio of atoms, is .

- a) Benzene
- b) Acetylene
- c) Hydrogen
- d) Sucrose

Answer is: d)

45). Avogadro's hypothesis relates volume of gases and .

- a) mass
- b) temperature
- c) pressure
- d) number of molecules

Answer is: d)

46). Atomicity of an element is .

- a) Valency of an element
- b) Atomic mass
- c) Number of atoms in one molecule of an element
- d) Isotope of an element

Answer is: c)

47). Atomicity is given by .

- a) Mass/molecular mass
- b) Mass of the element
- c) Molecular mass X atomic mass
- d) Molecular mass / atomic mass

Answer is: d)

48). The atoms of ${}^6\text{C}^{13}$ and ${}^7\text{N}^{14}$ are considered as .

- a) Isotopes
- b) Isomers
- c) Isobars
- d) Isotones

Answer is: d)

49). Isotones are the atoms of different elements having .

- a) Same mass number
- b) Same atomic number
- c) Same number of neutrons
- d) Same number of electrons

Answer is: c)

50). Atomicity of Phosphorous is .

- a) 2
- b) 3
- c) 4
- d) 5

Answer is: c