

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) 10°C
- b) 100°C
- c) 20°C
- d) 30°C

Answeris:c)

25).The solubility level of an aqueous solution of NaCl at 25°C is_____.

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

Answeris:b)

26).The increase in the solubility of Sodium halides, in water at 25°C 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) hypothhermic

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 the same atomic mass are called

_____.

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

Answer is: c)

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

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

Answer is: d)

39). Atomicity of oxygen in an 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, the 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)