

# 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  $2000 \text{ \AA}$
- d) Less than  $1 \text{ \AA}$

**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  $2000 \text{ \AA}$
- d) Less than  $1 \text{ \AA}$

**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  $1000 \text{ \AA}$

**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  $\text{CuSO}_4$  soluble in water is .

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

**Answer is: c)**

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

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

**Answer is: 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**

**Answer is: 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). ${}_6^{12}\text{C}$  and  ${}_6^{14}\text{C}$  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). ${}_{18}^{40}\text{Ar}$  and  ${}_{20}^{40}\text{Ca}$  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)**