# 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 producted 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 Å – 10 Å

b) 10 Å - 2000 Å

c) More than 2000 Å

d) Less than 1 Å

**Answer is: b)**

7). The particle size in a suspension is_____.

a) 1 Å – 10 Å

b) 10 Å - 2000 Å

c) More than 2000 Å

d) Less than 1 Å

**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 Å – 10 Å b)

10 Å - 100 Å

c) 100 Å - 1000 Å

d) More than1000 Å

**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) $10^0C$

b) $100^0C$

c) $20^0C$

**d)** $30^0C$

**Answer is: c)**

25).The solubility level of an aqueous solution of NaCl at $25^0C$ is_____.

a) 20g

b) 36g

c) 95g

**d)** 8g

**Answer is: b)**

26).The increase in the solubility of Sodium halides, in water at $25^0C$ is_____/

a) NaCl > NaBr > Nal

b) NaBr > Nal > NaCl

c) Nal > NaBr > NaCl

**d)** NaCl = NaBr > Nal

**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).$_{6}C^{12}$ and $_{6}C^{14}$ 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 $20^{th}$ 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).$_{18}Ar^{40}$ and $_{20}Ca^{40}$ 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 $_{6}C^{13}$ and $_{7}N^{14}$ 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)**