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) 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) 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) saturatio

c) n 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 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).Ar40 and 20Ca40 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 6C13 and 7N14 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)