IMPORTANT MCQ'S FOR SECTION A **IX CHEMISTRY**

1. **The branch of chemistry which deals with the emission of radiation fromnuclei is called**
   (a) Organic chemistry (b) Inorganic **(c) Nuclear chemistry** (d) Physical
2. **Neither definite shape nor definite volume is the property of**
   (a) Solid (b) Liquid **(c) Gas** (d) None of them
3. **The state of matter having definite shape and volume is known as:**
   (a) **Solid** (b) Liquid (c) Gas (d) Plasma
4. **The process in which a solid directly change to vapour is known as:**
   (a) **Sublimation** (b) Evaporation (c) Boiling (d) Melting
5. **When carbon burns in air, this gas is produced**
   (a) SO_2 (b) H_2S (c) NH_3 **(d) CO_2**
6. **The temperature at which the vapour pressure of a liquidbecomes equal to its externalpressure is called:**
   (b) Melting point **(b) Boiling point** (c) Freezing point (d) Triple point
7. **The theory that gases consists of molecules, which are in rapid option isknown as:**
   (a) Dalton theory (b) Bohr's theory **(c) Kinetic theory** (d) None of these
8. **Graham law refers to:**
   (a) B.P. of water ofgases **(b) gaseous diffusion** (c) gas comparison (d) volume change
9. **The branch of science that deals with the properties, composition& structure of matterrefers to:**
   (a) **Chemistry** (b) Biochemistry (c) Biology (d) Physics
10. **Chemistry deals with:**
    (a) The changes involved in the matter (b) Principles governing the changes
    (c) Composition & structure of matter **(d) All of the above**
11. **Which of the following is false in case of gases?**
    (a) diffuse easily (b) have mass
    (c) don not mix well (d) highly compressible
12. **All gases have:**
    (a) definite shape (b) definite volume
    (c) definite shape but no definite volume **(d) no definite shape or volume**
13. **The state of matter that possesses a definite arrangement of particles iscalled:**
    (a) gases (b) liquids **(c) solids** (d) none
14. **Some empirical laws known as laws of chemical combinations are:**
    (a) Law of conservation of mass (b) Law of constant composition
    (c) Law of multiple proportion **(d) All of these**
15. **Practical verification of law of conservation of mass studied by:**
    (a) **Landolt's experiment** (b) Rutherford experiment
    (c) Avogadro's experiment (d) None of the above

16. **$AgNO_3 + HCl \rightarrow AgCl + HNO_3$ in the above reaction after the chemicalreaction:**

Mass of reactants > mass of products (b) Mass of Products >Mass of reactants**(c) Mass of reactants = mass of products** (d) All of the above

17. **The different of oxygen 16 and 32 combine with the fixed mass of C(12g) in CO and CO_2respectively in the ratio of:**

(a) 2 : 1 **(b) 1 : 2** (c) 1 : 4 (d) 4 : 2

18. **Molecular mass expressed in gram is called**

(a) Atomic mass**(b) Molar mass** (c) Formula mass (d) Equivalent mass

19. **44 a.m.u of CO_2 is equal to it's:**

(a)Molar mass (b) Atomic mass **(c) Molecular mass** (d) Massnumber

20. **Neutron Possesses:**

- Positive charge **(b) No charge**

(c) negative charge (d) None of the above

21. **Though the three fundamental particles are present in almost allelements, one elementsdoes not possess:**

- Proton (b) Electron (c) Neutron **(d) Nucleons**

22. **Neutron was discovered by:**

- Thomson **(b) Chadwick** (c) Bohr (d) Rutherford

23. **Mass number of an element represents number of:**

- **Proton and neutrons** (b) Proton and electrons

(c) electron and neutrons (d) None of the above

24. **Atomic number of atoms represents:**

- Protons and neutrons **(b) Protons only**

(c) Protons or electrons in a neutral atom
(d) Electrons and neutrons

25. **Neutron is a fundamental Particle carrying:**

- a charge of +1 unit anda mass of 1 unit**(b) no charge and mass of 1 unit**

(c) no charge and no mass
(d) a charge of -1 unit and no mass

26. **In an atom, electrons:**
    - **move around the nucleus in circular orbits**
    - move around the nucleus in elliptical orbits
    - from diffused cloud around the nucleus
    - none of the above

27. **Mass of the neutron is:**
    - **same as proton** (b) much less than that of proton
    (c) slightly less than that of proton (d) slightly more than that of proton

28. **Positive ions are formed from the neutrons atom by the loss of:**
    - Positrons (b) protons **(c) electrons** (d) neutrons

29. **A-Z indicates the number of_____in the nucleus of an atom.**
    - Electron particles (b) Proton **(c) Neutron** (d) Alpha

30. **An atom of sodium has_____protons in it.**
    (a) 10 **(b) 11** (c) 12 (d) 14

31. **The electronic configuration of_____is K=2, L =8, M=1:**
    - Lithium **(b) Sodium** (c) Potassium (d) Rubidium

32. **Which of the following element has its electronic configuration $K^2 L^8 M^2$?**
    - Calcium (C(a) (N(a) **(b) Magnesium (Mg)** (c) Neon (Ne) (d) Sodium

33. **Which particles is the heaviest in the following:**
    - Electron particles (b) Proton (c) Neutron **(d) Alpha**

34. **The nucleus of an atom consists of:**
    - Electrons and protons **(b) Protons and neutrons**
    (c) Electrons and neutrons (d) Only protons

35. **Which particles is the lightest in the following:**
    - **Electron** particles (b) Proton (c) Neutron (d) Alpha

36. **The mass of electron is**
    (a) $9.11x10^{-26}g$ (b) $9.11x10^{-27}g$ **(c) $9.11x10^{-28}g$** (d) $9.11x10^{-30}g$

37. **The mass of proton is:**
    (a) $1.67\ x10^{-22}g$ (b) $1.67\ x10^{-23}g$ **(c) $1.67\ x10^{-24}g$** (d) $1.67\ x10^{-25}g$

38. **The e/m ratio of the rays_____varies with the nature of gas in thedischarged tube.**
    - **anode rays** (b) beta rays (c) gamma rays (d) cathoderays

39. **In Rutherford's Experiment very few alpha particles are:**
    - un-deflected **(b) bounced** (c) deflected (d) none

40. **Atomic Number of Oxygen is**
(a) 6 (b) 7 (c) 8 (d) 9

41. **A proton is how many times heavier than electron**
    (a) 1636 **(b) 1836** (c) 1936 (d) 1736

42. **Who put forward atomic model in 1911?**
    - **Rutherford** (b) Bohr (c) James Chadwick (d) Goldstein
43. **The maximum number of electrons in the shell is found out by the formulaof:**
    (a) n^2 **(b) $2n^2$** (c) n (d) 2n
44. **It is the longest period of the modern periodic table:**
    - Third period (b) Fourth period (c) Fifth period **(d) *Sixth period**
45. **The vertical column of the periodic table are called**
    - Periods (b) Series **(c) *Groups** (d) Rows
46. **The most reactive metal is**
    - ***Na** (b) Cu (c) Fe (d) Ca
47. **Group I-A element are called**
    - Halogens **(b) *Alkali metal** (c) Alkaline earth metal (d) Noble gases
48. **In the periodic table, the element have been arranged in the order ofincreasing**
    - ***Atomic number** (b) Mass number (c) Chemical reactivity(d) Density
49. **Which of the following is a good conductor of heat and electricity?**
    - Carbon (b) Hydrogen (c) Chlorine **(d) *Copper**
50. **How many elements are there in the third period of the periodic table?**
    (a) 2 **(b) *8** (c) 18 (d) 28
51. **There are_____elements in the sixth period of the periodic table.**
    (a) 2 (b) 8 (c) 16 **(d) *32**
52. **The symbol Mg represents the element**
    - Manganese **(b) *Magnesium** (c) Mercury (d) Molybdenum
53. **Element differ from one another according to the number of**
    - ***Protons** (b) Neutrons (c) Isotopes (d) a.m.u
54. **The incomplete period in the periodic table is:**
    (a) ***7** (b) 6 (c) 3 (d) 1
55. **The force which hold atom together in a form of compound or molecules iscalled**
    - Ionic bond (b) Covalent bond (c) Co-ordinate **(d) Chemical bond**
56. **Which of the following compounds contains all the three chemicalbond i.e. ionic, covalentand co-ordinate covalent bond?**
    - CO_2 (b) NaCl (c) CH_3COOH **(d) NH_4Cl**
57. **Which of the following molecule contains triple covalent bond?**
    - H_2 (b) O_2 (c) Cl_2 **(d) N_2**

58. **What type of bonding is found in CH_4 molecule?**
- **Covalent bond** (b) Hydrogen bond (c) Ionic bond (d) Metallic bond

59. **Which of the following molecule contains double covalent bond?**
- NH_3 **(b) CO_2** (c) HCl (d) CH_4

60. **Elements whose electronegativites are 1.2 and 3.0 form:**
- covalent bond **(b) ionic bond** (c) co – ordinate bond (d) metallic bond

61. **Polar Compounds are soluble in:**
- Organic solvent (b) non polar solvents **(c) polar solvents** (d) acids

62. **Cation is produced when:**
- **electrons is lost by the atom** (b) electron is gained by the atom

(c) proton is lost by the atom (d) proton is gained by the atom

63. **In covalent bonding:**
- Transference of electrons takes place **(b) Sharing of electrons takes place**

(c) Electrons are shared by one atom only (d) None

64. **Covalent compounds are soluble in:**
- inorganic solvents **(b) organic solvents** (c) concentrated acid (d) dilute acids

65. **In a double bond connecting tow atomic there is a sharing of:**
- 1 electrons (b) 2 electrons **(c) 4 electrons** (d) 6 electrons

66. **In a crystal, cation and anions are held together by:**
- electrons (b) nuclear forces **(c) electrostatic force** (d) covalent bonds

67. **If the bond has negligible ionic character, the nature of bond is:**

(a) Pure covalent (b) partial ionic (c) partial covalent (d) co – ordinate Covalent

68. **The bond in MgO is**

(a) **Ionic bond** (b) Covalent bond (c)Chemical bond (d) Co-ordinate covalent bond **covalent bond**

69. **Double covalent bond is denoted by:**

(a) Single short line **(b) two short line** (c) three short line (d) all of the above

70. **The atom which supplies the pair of elections for bond formation is knownas**

(a) acceptor (b) receiver **(c) donor** (d) none of these

71. **Co-ordinate covalent bond is always formed between the two:**

(a) like atom **(b) unlike atom** (c) similar atom (d) like and unlikeatom

72. **Homogenous mixture of solute and solvent is called a _____**

(a) Suspension **(b) Solution** (c) Solute (d) Solvent

73. **Brass of a solution of:**

(a) Copper and lead (b) Copper and Tin (c) Copper and Silver **(d) Copper and Zinc**

74. **The Solution that contains 1 mole of solute in 1 dm^3 of solution iscalled a ___ solution**

(a) Normal (b) Saturated (c) Molal **(d) Molar**

75. **A substances formed by mixing only two substance is called a solution,**
(a) **Binary** (b) Unified (c) Colloidal (d) Saturated

76. **The Solibility of_____in liquid increases with rise in temperature,**
(a) **Solids** (b) Liquids (c) Gases (d) Metals

77. **The no of moles of solute dissolved in 1 dm^3 of a solvent is ___ called :**
(a) **Molarity** (b) Normality (c) Mole fraction (d) Molality

78. **The_of a substance is the amount of substance thatdissolved as a giventemperature.**
(a) Crystallization **(b) Solubility** (c) Distillation (d) Filtration

79. **Solubility is usually expressed in grams of solute per_____gram ofsolvent**
(a) 10 **(b) 100** (c) 1000 (d) 10000

80. **Suspensions are_____because at least two substance can be clearlyidentified**
(a) Homogenous **(b) heterogeneous** (c) uniform (d) solution

81. **If 0.4 is the mole fraction of solute the mole fraction of solvent would be:**
(a) 0.1 **(b) 0.6** (c) 0.9 (d) 1.0

82. **It is define as the number of moles of solute dissolves in one litre ofsolution.**
(a) **Molarity** (b) Molality (c) Normality (d) Mole fraction

83. **The suspend particles in suspension are generallv of the size**
(a) 10nm (b) 100nm **(c) 1200nm** (d) 1 nm

84. **The sum of the mole fraction of solute and solvent is equal to**
(a) 3 (b) 2 **(c) 1** (d) 0

85. **Which of the following aqueous solution will conduct electric current quitewell?**
(a) Sugar (b) Glycerol (c) Pure Water **(d) HCl**

86. **The electric charge for electrode deposition of 1 g equivalent of a substanceis:**
(a) 1 ampere / sec (b) 1 ampere / hr
(c) 96500 C / sec **(d) Charge on 1 mole of substance**

87. **Solid NaCl is a bad conductor of electricity because:**
(a) in solid state, there are no electrons (b) In solid state,there are no ions **(c) In solid NaCl, there is no migration** (d) solid NaCl is covalent

88. **HCl solution conduct electricity because**
(a) **it is ionic bond** (b) its covalent bond (c) its form dative bond (d) It forms I- I bonds

89. **The substances that conduct electricity in molten states are**
(a) **electrolysis** conductor (b) non-electrolysis (c) Fused salt (d) Bad