

- Q.1 The outer most orbit of an atom of element if removed, then the remainder called as _____.
- (a) Kernel (b) Proton (c) Neutron (d) Electron
- Q.2 The accomplishment of eight electrons in outermost shell of the atom is _____.
- (a) Nucleus (b) Duplet (c) Triplet (d) Octet
- Q.3 By loss and gain of valency electrons, can atom of element forms _____ bond.
- (a) Single bond (b) ~~Electrovalent bond~~
(c) Co-ordinate bond (d) Covalent bond
- Q.4 The _____ is formed by mutual sharing of electrons
- (a) Electrovalent compound (b) Ionic compound
(c) Coordinate compound (d) ~~Covalent compound~~

Basic Science (Chemistry)

When electron pair is donated by only one atom, _____ bond is formed.

- Q.5 (a) **Co-ordinate bond** (b) Hydrogen bond
(c) Ionic bond (d) Covalent bond

Ans. : (a)

Q.6 In Calcium chloride molecule _____ linkage is formed.

- (a) No linkage (b) **Electrovalent linkage**
(c) Co-ordinate linkage (d) Co-ordinate covalent linkage

Ans. : (b)

Q.7 _____ bond present in Ammonium ion or sulphur dioxide.

- (a) Ionic bond (b) **coordinate bond**
(c) Covalent bond (d) Metallic bond

Ans. : (b)

Q.8 _____ Bond is formed by sharing of three pairs of electrons.

- (a) Double covalent bond (b) Electrovalent bond
(c) Triple bond (d) **Triple covalent bond**

Ans. : (d)

Q.9 The charge on ions depends on number of loss and gain of _____.

- (a) Neutrons (b) Nucleons (c) Electrons (d) **Protons**

Ans. : (d)

Q.10 The Co-ordinate bond is formed when one atom with a lone pair of electrons combines with _____.

- (a) An electron rich other atom (b) **An electron deficient compound**
(c) Proton of other atom (d) Nucleus of atom

Ans. : (b)

Q.11 In magnesium oxide molecule one atom of oxygen combines with _____ magnesium atom.

- (a) Five (b) Three (c) Four (d) **One**

Ans. : (d)

Q.12 _____ Bond is formed by sharing of one pair of electrons.

- (a) Double covalent bond (b) **Single covalent bond**
(c) Dative bond (d) Multiple covalent bond

Ans. : (b)

Q.13 The electronic configuration after bond formation is of _____.

- (a) Salts (b) Solutes (c) Solvents (d) **Noble gases**

Ans. : (d)

Q.14 The noble gases such as helium, neon are _____.

- (a) **Monoatomic** (b) Triatomic (c) Diatomic (d) Polyatomic

Ans. : (a)

Q.15 _____ show tendency to lose the electrons.

- (a) Noble gases (b) Non-Metals (c) **Metals** (d) None of these

Ans. : (c)

Q.16 _____ accept (or gain) the electrons to complete octet.

- (a) Metals (b) **Non-Metals** (c) Inert gases (d) None of these

Ans. : (b)

Q.17 The molecule of oxygen has _____ atoms.

- (a) **Two** (b) Four (c) Three (d) One

Ans. : (a)

Q.18 Nitrogen molecule is formed by mutual sharing of _____ pairs of electrons.

- (a) Five (b) **Three** (c) Two (d) One

Ans. : (b)

Q.19 The chlorine gas molecule is _____.

- (a) Monatomic (b) Tri-atomic (c) Tetratomic (d) **Diatomic**

Ans. : (d)

Ans. : (d)

Tech Knowledge
Publications

Basic Science (Chemistry)

- Q.20 Sodium combines with chlorine, by _____.
- (a) **Ionic valency** (b) Covalency
(c) Co-ordinate valency (d) Valency
- Q.21 The two atoms of hydrogen combines with one atom of oxygen to form its _____ compound.
- (a) Co-ordinate compound (b) **Covalent compound**
(c) Ionic compound (d) Electrovalent compound
- Q.22 Metals have good conductivity due to _____.
- (a) Protons (b) Neutrons
(c) **Localised electrons** (d) Nucleons
- Q.23 Ionic compounds (like NaCl) are soluble in _____.
- (a) **Water** (b) Kerosene (c) Benzene (d) Acetone
- Q.24 Covalent compounds are insoluble in _____.
- (a) Benzene (b) **Water**
(c) Carbon tetrachloride (d) Acetone
- Q.25 Compounds formed by ionic bond are _____ conductor of electricity.
- (a) Non (b) **Good** (c) Poor (d) None of these
- Q.26 When covalent compounds are dissolved in solvent, they do not produce _____.
- (a) Charge (b) **Ions** (c) Electrons (d) Protons
- Q.27 All properties of compounds depend on _____.
- (a) Atoms (b) Ions (c) Molecules (d) **All of the above**
- Q.28 When the bond formed between atoms of element, they achieve _____.
- (a) Charge (b) **Stable configuration of noble gas**
(c) Avoid reaction (d) None of these
- Q.29 Regular arrangement in which atoms are closely packed is known as _____.
- (a) Diagonal structure (b) Tetrahedral structure
(c) **Crystal lattice** (d) None of these
- Q.30 Covalent compounds are _____.
- (a) Good conductor of electricity (b) Poor-conductor of electricity
(c) **Non-conductor of electricity** (d) None of the above
- Q.31 The gain of electron (e^-) forms _____.
- (a) **Negative ions** (b) Positive ions
(c) Cathodes (d) Anodes
- Q.32 Ionic bond is also known as _____.
- (a) Covalent bond (b) Co-ordinate bond
(c) Metallic bond (d) **Electrovalent bond**
- Q.33 Dative bond is another name of _____.
- (a) Ionic bond (b) Electrovalent bond
(c) Covalent bond (d) **Co-ordinate bond**

Basic Science (Chemistry)

- Q.34 A chemical bond is formed when _____.
- (a) Neutrons of combining atoms participate
 (b) Protons of combining atoms participate
 (c) Valence electrons of combining atoms participate
 (d) All of the above
- Ans. : (c)
- Q.35 When positive end of one molecule is attracted weakly to negative end of another molecule then force between them is known as _____.
- (a) Cohesive force
 (b) Covalent linkage
 (c) Electrostatic force
 (d) Dipole-dipole interaction
- Ans. : (d)
- Q.36 Metal atom loses valence electrons to form _____.
- (a) Cation
 (b) Anion
 (c) Negative ion
 (d) None of these
- Ans. : (a)
- Q.37 Non-metal atoms gain electrons to form _____.
- (a) Positive ion
 (b) Anion
 (c) Cation
 (d) None of these
- Ans. : (b)
- Q.38 The smallest building unit of _____ is called as Unit cell.
- (a) Liquids (b) Gases (c) Crystal lattice (d) All of the above
- Ans. : (c)
- Q.39 Which of the following is solid crystal ?
- (a) Glass (b) Rubber (c) Plastic (d) Sodium chloride
- Ans. : (d)
- Q.40 _____ is amorphous solid ?
- (a) Sugar (b) Diamond (c) Glass (d) Sodium chloride
- Ans. : (c)
- Q.41 Sodium metal has the _____ crystal lattice.
- (a) Simple cubic structure (b) Body centered cubic structure
 (c) Face centered cubic structure (d) None of these
- Ans. : (b)
- Q.42 Aluminium and gold have _____ crystal lattice.
- (a) Body centered cubic structure (b) Simple cubic structure
 (c) Face centered cubic structure (d) None of these
- Ans. : (c)
- Q.43 Magnesium and zinc have _____ crystal lattice.
- (a) Simple cubic structure (b) Body centered cubic structure
 (c) Face centered cubic structure (d) Hexagonal close packed structure
- Ans. : (d)

44. The melting & boiling point of covalent compound is _____
(a) High (b) low (c) Depends upon no. of e⁻ shared (d) depends on bonded atoms.
→ low.

45. The example of hexagonal closed packed structure is _____
(a) Hydrogen (b) Helium (c) Magnesium
(d) caesium chloride
→ magnesium

46. Covalent compounds are _____ in water.
(a) soluble (b) inert (c) insoluble
(d) isomeric
→ insoluble

47. A solid having irregular shape is called as _____
(a) crystalline (b) Amorphous (c) Anisotropic
(d) Isomorphous
→ Amorphous

48. The state of matter in which particles are packed closed to each other is
(a) solid state (b) gaseous state
(c) liquid state (d) creaceous & liquid state.
→ solid state

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- (b) low
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- (b) Amorphous
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- (d) Isomorphous

→ Amorphous

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- (a) solid state
- (b) gaseous state
- (c) liquid state
- (d) gaseous & liquid state.

→ solid state

49. The solids in which the magnitude of physical changes with the direction of measurement are _____

- (a) Amorphous
 - (b) crystalline
 - (c) metallic
 - (d) Ionic
- crystalline

50. Name the solids which are hard & brittle.

- (a) metallic
 - (b) covalent
 - (c) molecular
 - (d) Ionic
- Ionic

51. The state of matter in which there is huge intermolecular space between their particles is _____

- (a) solid state
 - (b) Gaseous state
 - (c) liquid state
 - (d) solid & liquid state.
- Gaseous state

52. Anions are formed from non-metallic atom by _____

- (a) loss of e^-
 - (b) gain of e^- s
 - (c) loss of proton
 - (d) gain of protons.
- gain of e^- s.

52. The combination of crystalline solids to change the values of physical property when measured in different direction is known as _____.

- (a) Anisotropic
- (b) Isotropic
- (c) Allotropic
- (d) Galatropic

→ Isotropic

54. The number of lone electron pairs in nitrogen (N_2) molecule is

- (a) 1
- (b) 2
- (c) 3
- (d) 4

→ 3

55. molecule of chlorine gas is ($\text{N}_2, \text{H}_2, \text{O}_2$)

- (a) Monoatomic
- (b) Diatomic
- (c) Triatomic
- (d) Tetraatomic

→ Diatomic

56. Boiling point of water increased because of presence of

- (a) intermolecular hydrogen bonding.
- (b) metallic bond
- (c) co-ordinate bond
- (d) intramolecular hydrogen bond

→ Intermolecular hydrogen bond.

57. Davy's bond is another name of _____
(a) Ionic bond (b) Electrovalent bond
(c) covalent bond (d) co-ordinate bond

→ co-ordinate bond

58. Identify the compound formed by mutual sharing of electrons _____
(a) Electrovalent (b) IONs
(c) covalent (d) co-ordinate

59. The co-ordination no. of face centered cubic unit cell is _____
(a) 1 (b) 8 (c) 6 (d) 12.

→ 12

The coordination no. of body centered cubic unit cell is _____
(a) 8 (b) 6 (c) 12 (d) 1

→ 8

60. The coordination no. of hexagonal close packed structure in 2D is _____
(a) 6 (b) 8 (c) 12 (d) 14

→ 6

61. Example of simple cubic cell is _____
(a) NaCl (b) Au (c) Zn (d) Mg

→ NaCl

62. Example of body centered cubic cell is _____
(a) Cd (b) Li (c) Mg (d) NaCl

→ Li

63. Example of face centered cubic structure is _____

- (a) Na (b) Au (c) Fe (d) Co

→ Au

64. Repeatable entity of a crystal structure is known as _____

- (a) unit cell (b) crystal (c) lattice (d) miller indices

→ unit cell

65. Malleability & ductility properties are shown by _____

- (a) covalent compounds (b) metallic compounds
(c) ionic compounds (d) electrovalent compounds.

→ metallic compounds.

66. Dative covalent bond is found in _____.

- (a) ammonia (b) ammonium ion (c) urea
(d) nitrogen

→ Ammonium ion

67. Metals are good conductors due to _____

- (a) ionic lattice (b) crystalline lumps
(c) mostly solids (d) delocalized electrons.

→ delocalized electrons.

68. When a covalent bond is formed between hydrogen atom & a very electronegative atom, then it is known as _____

- (A) Ionic bond (B) Hydrogen bond (C) Co-ordinate bond (D) All of the above

→ Hydrogen bond.

69. Complete transfer of one or more electrons between atoms constituting in forming _____

- (a) Ionic bond (b) covalent bond (c) co-ordinate bond (d) Dative bond

→ Ionic bond

70. Bond formed by sharing of four electrons is called as _____

- (a) covalent bond (b) Electrovalent bond (c) Dative covalent bond (d) Double covalent bond

→ Double covalent bond

71. Nitrogen molecule is an example of _____

- (a) single covalent bond (b) double covalent bond (c) triple covalent bond (d) single co-ordinate bond.

→ Triple covalent bond

72. Representation of bond by single double or triple line is done in — — —

- (a) metallic bond
- (b) coordinate bond
- (c) covalent bond
- (d) ionic bond

→ covalent bond

73. Which of the following characteristic does not possess by the metal.

- (a) lustre
- (b) ductility
- (c) increase in conductance by increase in temperature
- (d) malleability

→ increase in conductance by increase in temperature.

74. tendency of atoms to acquire eight electron in their valence shell is — — —.

- (a) octet rule
- (b) duplet rule
- (c) triplet rule
- (d) All of the above

75. What type of bond form between hydrogen - en foreign atom in the given structure — — —

- (a) Hydrogen bond
- (b) metallic bond
- (c) Non-metallic bond
- (d) oxygen bond

→ Hydrogen bond

76. Which is the example of strong acids.
a) NaOH b) KOH c) H_2SO_4 d) CH_3COOH

→ H_2SO_4

77. Which is the example of weak base.
a) NH_4OH b) KOH c) HCl d) NaOH

→ NH_4OH

78. Strong electrolytes have _____ degree of ionization

a) low b) high c) none d) a & b

→ high

79. Which is the example of Non-electrolytes.

a) NaCl b) KCl c) $BaSO_4$ d) petrol

→ petrol

80. Weak electrolytes show _____ conductivity

a) high b) same c) low d) none

→ low