

Chemistry Important MCQs

Class 9 Chapter 4

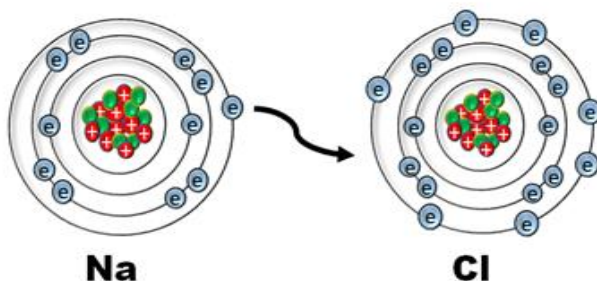
1. Atoms react with each other to attain ____.

A) Power

B) Stability

C) Inertia

D) None of them



- To become **stable**
- To **complete the valence shell electrons**
- Get the **noble gas configuration**

Answer: B (Stability)

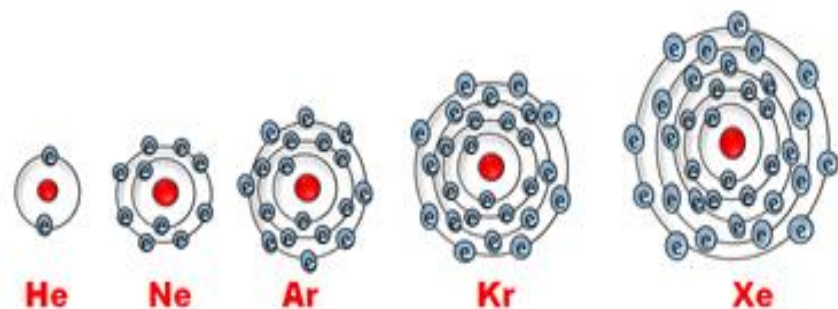
2) The ____ have ns^2, np^6 electronic configuration in the outermost shell.

A) Noble gases

B) Micro gases

C) Compressed gases

D) All of them

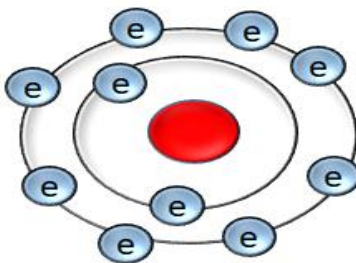


**Noble gases having complete valence(outermost) shell configuration
Therefore, noble gases are non-reactive & stable**

Answer: A (Noble gases)

3) The tendency of atoms to have ___ electron configuration in their valence shell while bonding, is called the octet rule.

- A) Four
- B) Five
- C) Eight**
- D) Nine



Answer: C (Eight)

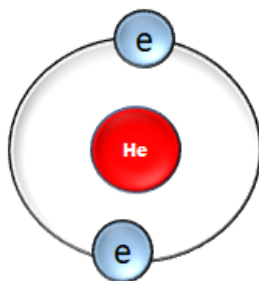
4) Helium contains two electrons in its valence shell and is also chemically ____.

- A) Very reactive
- B) Inert**
- C) Colloidal
- D) Imperfect

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Answer: B (Inert)

5) The tendency of some atoms to attain ___ electron configuration in their valence shell while bonding, is called the duplet rule.

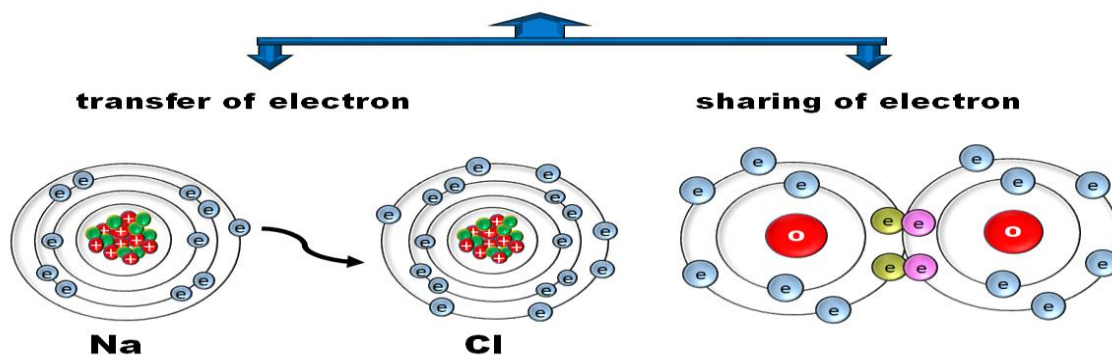
- A) One
- B) Seven
- C) Two**
- D) None of them

Answer: C (Two)

6) The force of attraction that holds the atoms together in substances is called ___.

- A) Gelling
- B) Joints
- C) Booking
- D) Chemical bonds**

CHEMICAL BONDS



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Answer: D (Chemical bonds)

7) Atoms other than the _____ can react with other elements.

A) Noble gases

B) Metals

C) Metalloids

D) None of them

Answer: A (Noble gases)

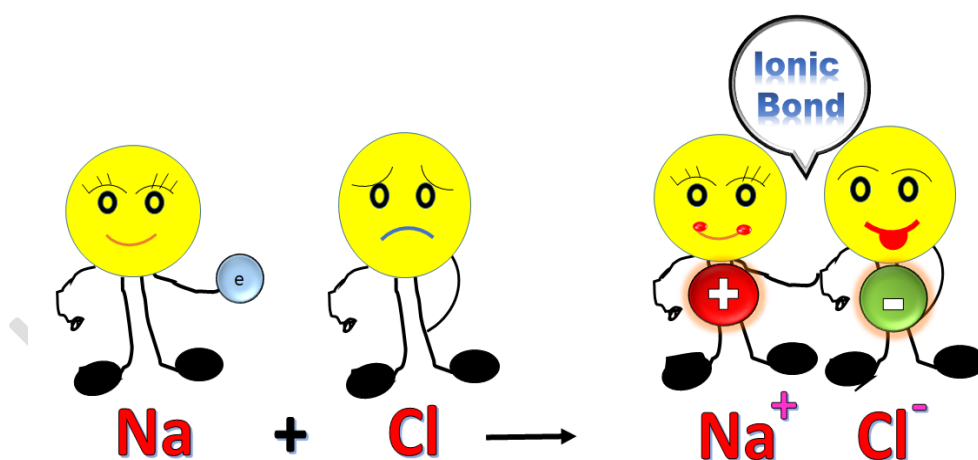
8) The bond formed due to the complete transfer of electrons is called _____

A) Metallic bond

B) Co-ordinate bond

C) Ionic bond

D) Nelson's bond



Answer: C (Ionic bond)

9) When one atom loses an electron it forms ____.

A) Bond

B) Cation

C) Negative ion

D) None of them

Answer: B (Cation)

10) When an atom gains an electron it forms ____.

A) Anion

B) Positive ion

C) Alpha rays

D) Beta rays

Answer: A (Anion)

11) Compounds that consist of ions held by electrostatic forces are called ____ compounds.

A) Metallic

B) Gaseous

C) Mustard

D) Ionic

Answer: D (Ionic)

12) Ionic compounds as a whole are electrically ____.

A) Double Positive

B) Beta rays

C) Neutral

D) Protons

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Answer: C (Neutral)

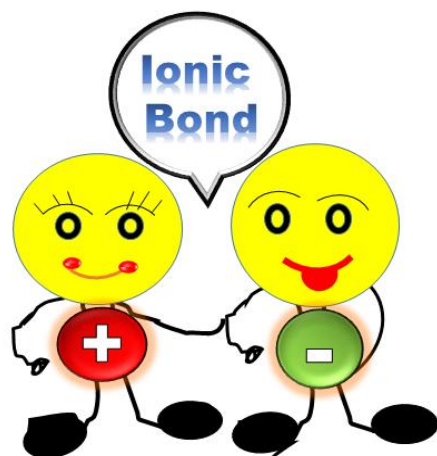
13) Ionic bonds are also called ____ bonds.

A) Electro-valent

B) Dative

C) Co-ordinate

D) None of them



Answer: A (Electro-valent)

14) The bond formed by the mutual sharing of electrons is called __.

A) Covalent bond

B) Electro-valent bond

C) Metallic bond

D) All of these



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Answer: A (Covalent bond)

15) Lone pairs are pairs of valence electrons that are ____

A) Shared

B) Not shared

C) Transferred

D) All of these

Answer: B (Not shared)

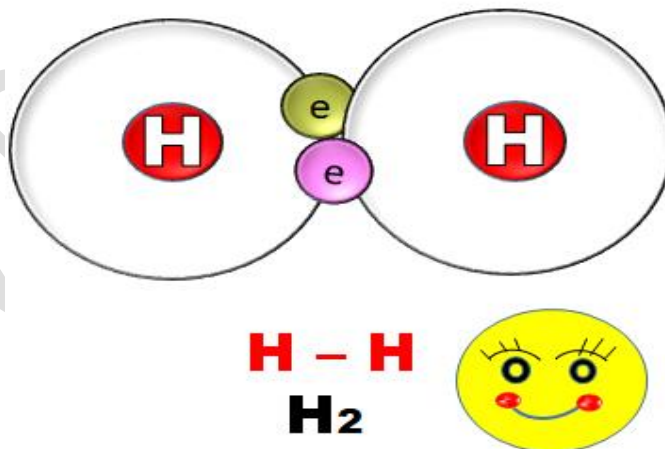
16) Covalent bond that is formed by the mutual sharing of one electron pair is called ____ covalent bond.

A) Lone

B) Single

C) Mono

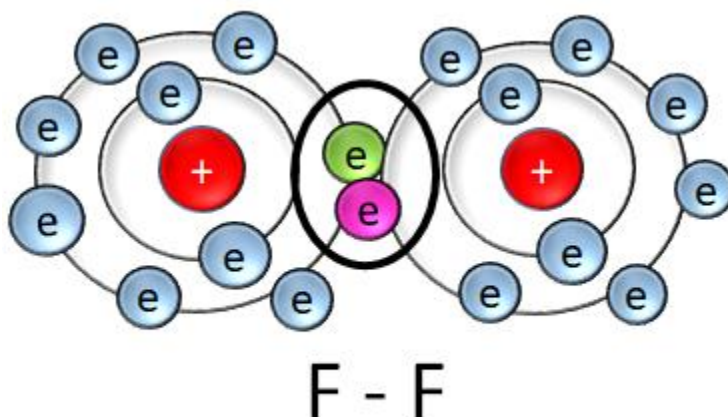
D) Co-ordinate



Answer: B (Single)

17) F_2 molecule is an example of ___ covalent bond.

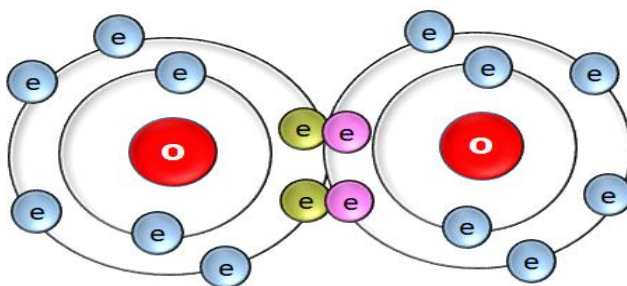
- A) Double
- B) Quadruple
- C) Single**
- D) Ionic



Answer: C (Single)

18) Double covalent bond is formed by the sharing of ___ electron pairs.

- A) One
- B) Six
- C) Zero
- D) Two**



Answer: D (Two)

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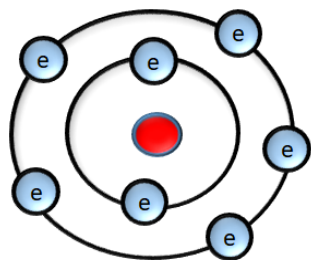
19) N_2 molecule is an example of ___ covalent bond.

A) Co-ordinate

B) Poly

C) Triple

D) None of them



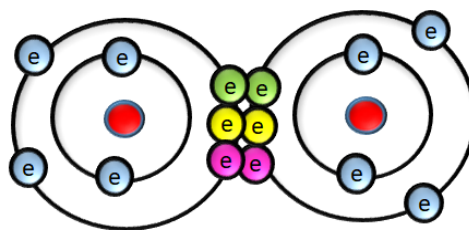
Nitrogen

N-atom (5 Valence e-)

Unstable

After sharing

**Get the noble gas configuration
&
becomes stable**



Answer: C (Triple)

20) Triple covalent bond is formed by the mutual sharing of ___ electron pairs.

A) Three

B) Single

C) Six

D) Eight

Answer: A (Three)

21) Which of the following contains a double covalent bond?

A) N_2

B) O_2

C) Na_2

D) He

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Answer: B (O₂)

22) When the electronegativity difference between two elements is greater than 1.7 then the bond formed is called __

A) Ionic bond

B) Metallic bond

C) Helium bond

D) All of these

Answer: A (Ionic bond)

23) When two identical atoms share electron pairs, then both the atoms exert the same amount of force on the shared electron pairs such a covalent bond is called ___ covalent bond.

A) Polar

B) Non-polar

C) Electro-static

D) Neutral

Answer: B (Non-polar)

24) When two different atoms share electron pairs, then both atoms exert a different amount of force on the shared electron pairs such a covalent bond is called ___ covalent bond.

A) Polar

B) Non-polar

C) Electro-valent

D) Non-ionized

Answer: A (Polar)

25) Inter-molecular forces are __ than ionic and covalent bonds.

A) Volatile

B) Weaker

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C) Static

D) Rarer

Answer: B (Weaker)

26) Dipole-dipole interactions occur between ____ molecules.

A) Non-ionic

B) Electro-valent

C) Polar

D) None of them

Answer: C (Polar)

27) Which of the following atom will not form an ion

A) A (Atomic number = 19)

B) B (Atomic number = 21)

C) C (Atomic number = 14)

D) D (Atomic number = 18)

Answer: D (Atomic number = 18)

28) An atom with atomic number = 3 will form a ____.

A) Beta ray

B) Gamma ray

C) Cation

D) None of them

Answer: C (Cation)

29) Tin belongs to Group IV A it contains ___ valence electrons.

A) 14

B) 24

C) 4

D) 34

Answer: C (4)

30) Find out the ionic compound.

A) F_2

B) H_2O

C) NaCl

D) None of them

Answer: C (NaCl)

31) Aqueous solutions of ___ conduct electricity.

A) Ionic compounds

B) Hydrogen compounds

C) Nitrate compounds

D) All of them

Answer: A (Ionic compounds)

32) In water, the ions are ___ about in the aqueous solution.

A) Free to move

B) Stagnant

C) Rotating

D) Horrific

Answer: A (Free to move)

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33) Which of the following will form an ionic compound?

A) H, O

B) K, Cl

C) H, Cl

D) C, O

Answer: B (K,Cl)

34) In CsCl every Cs^+ ion is surrounded by ____ - Cl ions.

A) 18

B) 28

C) 8

D) 19

Answer: C (8)

35) Both NaCl and CsCl form colorless __ crystals.

A) Rectangular

B) Pyramidal

C) Trigonal

D) Cubic

Answer: D (Cubic)

36) At room temperature almost all the ionic compounds are ____ solids.

A) Metallic

B) Crystalline

C) Molecular

D) None of them

Answer: B (Crystalline)

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37) Ionic compounds have ____ melting points.

- A) Immeasurable
- B) Low
- C) Transitional
- D) High**

Answer: D (High)

38) Sodium chloride's melting point is ____ °C.

- A) 80 °C
- B) 934 °C
- C) 801 °C**
- D) 108 °C

Answer: C (801 °C)

39) The adhesive function of paints and dyes is due to ____ bonding.

- A) Hydrogen**
- B) Electric
- C) Peculiar
- D) Metallic

Answer: A (Hydrogen)

40) There are _ electrons in the outermost shell of inert gases.

- A) 8**
- B) 18
- C) 05
- D) 03

Answer: A (8)

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41) Which of the following will tend to achieve two electron configuration in the valence shell?

- A) Sc
- B) Li**
- C) Pb
- D) Po

Answer: B (Li)

42) All of the following pairs of elements will form a covalent bond except _____

- A) H, O
- B) C, O
- C) Na, Cl**
- D) H, Cl

Answer: C (Na, Cl)

43) The interaction of electron-deficient hydrogen and lone pair on a nearby highly electronegative atom such as _____ is called a hydrogen bond. Select the correct set of elements.

- A) S, N, P
- B) Na, Cl, Ar
- C) N, O, F**
- D) None of them

Answer: C (N, O, F)
