

Ions And Ionic Compounds

Multiple choice - choose the best option.

Q.1. Within a molecule, the atoms are held together by

1. Vander Wall's forces.
2. Ionic bonds
3. Chemical bonds
4. Covalent bonds

Q.2. Law of octet is held true and the atom is absolutely stable in the following , except

1. Oxygen
2. Neon
3. Krypton
4. Xenon

Q.3. Chlorine atom gains one electro to resemble the configuration of which atom?

1. Neon
2. Argon
3. Radon
4. Helium

Q.4. Which of the following statements is untrue or false in case of atoms.

1. They are electrically neutral
2. They may or may not be capable of free existence
3. They have equal number of protons and electrons
4. They are charged particles.

Q.5. Transfer of electrons takes place from

1. One atom to another in Ionic bon
2. One atom to two other atoms in Ionic bon
3. Atom of a non-metallic element to the atom of metallic element, in Ionic bon
4. Atom of the metallic element, in Ionic bon

Q.6. Transfer of one or more electrons takes place in case of

1. Chemical bon
2. Electrovalent bond
3. Covalent bond
4. Molecular bon

Q.7. Which of the following elements possess the electronic configuration as 2,8,6?

1. Na
2. S
3. Si
4. Al

Q.8. Which of the following elements have a valency four"?

1. Mg
2. AL
3. Si
4. P

Q.9. Which of the following elements is a non-metal?

1. P
2. Na
3. Mg
4. Al

Q.10. Valence electron is the term used for

1. Number of protons in an atom
2. Remaining electrons in an atom
3. Number of electrons present in outermost shell of an atom.

Q.11. Noble gases or inert gases are

1. Electro-positive in nature
2. Electro-negative in nature
3. Metalloids
4. Do not take part in chemical reactions.

Q.12. Which of the following compounds in an example of covalent molecule?

1. HCl
2. NaCl
3. MgCl₂
4. CaO

Q.13. Magnesium chloride is formed by losing of electrons to chloride atoms, the Magnesium atom has the number of valence electros as

1. One
2. Two
3. Three
4. Four

Q.14. In order to resemble Neon, Oxygen needs to

1. Lose one electron from its outermost shell.
2. Gain one electron to from its outermost shell.
3. Lose two electrons from its outermost shell.
4. Gain two electrons to from its outermost shell.

Q.15. Covalent bond is formed by mutual sharing of one or more electrons between atoms of

1. Metallic elements
2. Non-metallic elements
3. None of the above
4. Both 'a' and 'b'

Q.16. An Oxygen molecule is formed due to

1. Ionic bonds.
2. Electrovalent bonds.
3. Covalent bonds.
4. Heteropolar bonds.

Q.17. The Methane molecule consist of

1. One single and two double bonds.
2. Double bonds.
3. Two single and two double bonds
4. Four single bonds.

Q.18. Methane molecule is an excellent example of which of the following?

1. Electrovalent bonds
2. Covalent bonds
3. Polar covalent bonds
4. Non-polar covalent bonds.

Q.19. Which of the following properties is not related to Ionic compounds? They are

1. Liquids or soft solids
2. Brittle solids
3. Crystalline solids
4. Charged particles

Q.20. Which compounds are bad conductors of electricity?

1. Ionic
2. Electrovalent
3. Covalent
4. Electrostatic

Q.21. Ionic compounds are

Soluble in water

Insoluble in water

Generally soluble in water

Soluble in organic solvents

Q.22. Covalent compound have

1. Low melting and high boiling points.
2. High melting and low boiling points.
3. Low melting and boiling points
4. High melting and boiling points.

Q.23. The electronic configuration 2,8,18,18,8 belongs to

1. Neon

2. Xenon
3. Krypton
4. Radon

Q.24. The electronic configuration 2,8,18,32,18,8 belongs to

1. Neon
2. Xenon
3. Krypton
4. Radon

Q.25. Chlorine atom gains an electron any gets the electronic configuration same as that of

1. Argon
2. Helium
3. Neon
4. Krypton

Q.26. Sodium ion Na^+ has an electronic configuration as

1. 2,9
2. 2,8,1
3. 2,8
4. 2,7,2

Q.27. Elements 13A27 has a valency of

1. 1
2. 2
3. 3
4. 4

Q.28. Insert gases can

1. Gain one electron.
2. Lose one electron
3. Both gain or lose one electron.
4. Neither gain nor lose any electron.

Q.29. In CaO ,

1. Calcium loses one electron to Oxygen.
2. Calcium gains one electron from Oxygen.
3. Calcium loses two electrons to Oxygen.
4. Calcium gains two electrons from Oxygen.