ICSE Class 8 Chemistry Important Questions

1. Which of the following pictures represent the Bohr's model of an atom?



- (a) I
- (b) II
- (c) III
- (d) IV
- 2. Sodium forms sodium cation by loss of?
 - (a) One electron
 - (b) Two electrons
 - (c) Three electrons
 - (d) Four electrons
- 3. Hydrogen frees metals from their
 - (a) Sulphates
 - (b) Oxides
 - (c) Nitrates
 - (d) Chlorides
- 4. State the electronic configuration of the following atoms:
 - i. Atom 'A' (Atomic number = 12)
 - ii. Atom 'B' (Atomic number = 19)
 - iii. Atom 'C' (Atomic number =7)
 - iv. Atom 'D' (Atomic number = 26)
 - v. Atom 'E' (Atomic number = 10)
- 5. Fill in the blanks and rewrite the sentences:
 - i. When few drops of phenolphthalein are added to sodium hydroxide, the solution turns_____.
 - ii. Separation of components of air such as liquid nitrogen and liquid oxygen is possible by_____.
- iii. The three states of matter are classified on the basis of differences in certain _ properties.
- iv. A mixture which has different composition and properties in different parts of their

V. mass is called a mixture.

is used in the laboratory for the preparation of hydrogen using dilute hydrochloric acid.

6. State whether the following statements are true or false.

Rewrite the false statement.

- i. A compound is a pure substance composed only of one kind of element combined chemically in a fixed proportion by mass.
- ii. A chemical reaction in which two or more substances combine to form a single product is called a combination reaction or synthesis.
- iii. In the formation of ammonia from hydrogen and nitrogen iron is used as positive catalyst.
- iv. Magnesium has atomic number 12 and atomic mass number 24.
- v. The insoluble solid settels down in a beaker is called as sediment.
- 7. Name the following:
 - i. Conversion of a solid to a liquid on heating
 - ii. Conversion of a liquid to a vapour (or gas)
 - iii. Conversion of a vapour (or gas) to a liquid
 - iv. Conversion of a liquid to a solid
 - v. The outermost shell or orbit of an atom.
- 8. Give distinguishing explanation between alpha rays, beta rays and gamma rays.
- 9. What is a metal reactivity series? What are its important features?

10. Define the following:

- i. Lamp black
- ii. Sugar charcoal
- iii. Chemical equation
- iv. Orbit
- v. Bone charcoal

11. Match the name of the radical given in **Column A** with its formula given in **Column B**.

Sr. No.	Column A	Column B
	(Name of the	
	radical)	(Formula)
1.	Chlorate	HCO ₃ ⁻
2.	Bicarbonate	MnO_4^-
3.	Bisulphate	Cu ²⁺
4 .	Permanganate	ClO ₃ -
5.	Cupric	HSO_4^-

- 12. Write the formula of the given compounds:
- i. Acetic acid
- ii. Sodium hydroxide
- iii. Sulphuric acid
- iv. Hydrochloric acid
- v. Ammonium hydroxide

13. Write the electronic configuration of the following elements:

- i. Sodium
- ii. Chlorine
- iii. Hydrogen
- iv. Nitrogen
- v. Oxygen
- 14. Differentiate between compound and mixture.
- 15. What is atomicity? Give one example each of mono atomic and diatomic molecule.
- 16. Give the chemical equations for a reaction of potassium with
 - (a) Oxygen
 - (b) Water
- 17. Write the main features of Rutherford's atomic model.
- 18. How can you prove that hydrogen burns in air to produce water?
- 19. Differentiate between oxidation reaction and reduction reaction.
- 20. What are protons, neutrons and electrons?