

MULTIPLE CHOICE QUESTIONS

1. The chemical symbol for nitrogen gas is:

- (a) Ni (b) N₂ (c) N⁺ (d) N

2. Choose the correct statement

(a) Two atoms of hydrogen combine with one atom of oxygen to give water molecule. (b) One atom of hydrogen combines with one atom of chlorine to form hydrogen chloride. (c) One atom of nitrogen combines with 3 atoms of hydrogen to form 1 molecule of ammonia. (d) One atom of carbon combines with one molecule of oxygen to form one molecule of carbon dioxide.

3. Choose the odd molecule

- (a) Argon molecule (b) Chlorine molecule
(c) Oxygen molecule (d) Fluorine molecule

4. How many atoms are present in one molecule of ozone?

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

5. In water, the proportion of oxygen and hydrogen by mass is:

- (a) 1:4 (b) 1:8 (c) 4:1 (d) 8:1

6. Identify the correct symbol of Sodium:

- a) S b)Na c)So d)N

ONE MARK QUESTIONS

7. What is a molecule?

8. Give two examples for cations.

9. Name the elements present in the following: (a) Water (b) ammonia (c) sulphur dioxide

10. (i) State the law of constant proportions. (ii) Define molecular mass of a substance.

TWO MARKS QUESTIONS

11. Explain the difference between 2N and N₂

12. Write the differences between an atom and molecule

13. Write the formulae of: (a) Magnesium hydroxide (b) Hydrogen sulphide (c) Potassium chloride (d) Calcium oxide (e) Barium chloride (f) Sodium carbonate

14 (a) How do you differentiate between a molecule of an element and a molecule of a compound? Write one example of each. (b) Write the chemical formula of baking soda.

15. (a) What are polyatomic ions?

THREE MARK QUESTIONS

16. (a) Define atomic mass unit. (b) Define molecular mass (c) Give an example of diatomic and triatomic molecule of compounds.

17. Classify the following compounds as diatomic, triatomic and polyatomic molecules. HCl, H₂, H₂O, NH₃

18. (a) What is an ion? Write the symbol for calcium ion and aluminium ion (b) Give the difference between an anion and a cation. (c) How many atoms are present in one molecule of sulphur?

19. (i) Write the name of the compound (NH₄)₂SO₄ and mention the ions present in it. (ii) Write the chemical formulae of: (a) Sodium carbonate (b) A