Atoms and molecules

Fill in the blanks

1. Examples of polyatomic ions are ………………… , ……………………
2. Formula of quick lime is ………………………
3. Formula of baking soda is ……………………
4. Latin name of sodium is ……………………
5. Law of conservation of mass is given by ………………………

One marks questions

1. Define atomicity? Write two diatomic molecules.
2. What is chemical formula?
3. Define one atomic mass unit?
4. What is formula unit? Give one example?
5. Define valency with example?

Three marks questions

1. Derive the formula of potassium phosphate?
2. Calculate the formula unit of Na_2CO_3 , $FeSO_4 . 7H_2O$
3. Calculate the mass of 0.5 ml of oxygen atom.
4. What is ion? Differentiate between anion and cation?
5. Convert 20g of water into moles?

Five marks questions

1. Write the chemical formula of
(i) Ammonium carbonate
(ii) Magnesium chloride
(iii) Calcium hydroxide
2. Calculate the number of molecules of sulphur (S8) in 16 g of solid sulphur? (atomic mass of S= 32)
3. Explain the law of constant proportion with one example?
4. Calculate the formula unit mass of $(NH_4)_2CO_3$.
5. Compute the number of sodium ions present in 5.85 g of sodium chloride.