- 1. Compare and contrast ionic and covalent compounds with respect to: (4 marks)
- i) types of elements that form each compound
- ii) the type of bonds that form in each compound
- 2. Complete the chart by identifying the type of compound and writing its name or formula.(20 marks)

Formula	Ionic (I) or Covalent (C) Molecule	Name
N_2O_5		
MgSO ₄		
		Calcium chloride
		Iron (III) carbonate
		trihydrogen mononitride
		zinc hydroxide
P ₃ O ₅		
Sn ₃ (PO ₄) ₂		
LiOH		
		tin (IV) sulfate
		calcium acetate

3. State the **Law of Conservation of Matter**.(2 marks)

4. State the **Law of Conservation of Mass**.(2 marks)

- 5. The skeleton equation is given, write the balanced chemical equation beside it. (10 marks)
 - $a. \quad Na \quad + \quad F_2 \quad \ \rightarrow \qquad NaF$

b. $CaCO_3 \rightarrow CO_2 + CaO$

 $c. \quad H_2SO_4 \ + \quad Al \quad \rightarrow \quad \ Al_2(SO_4)_3 \ + \quad H_2$