BALANCING EQUATIONS

Q1. Write the name and number of elements present in the following compounds.

1 has been solved to guide you.

1 mark will be awarded if all the numbers and names are written correctly.

| Compound | Name and number of elements | Compound | Name and number of elements | Compound | Name and number of elements |
|--------------------------------|-----------------------------------|---------------------------------|-----------------------------|--|-----------------------------|
| HCI | 1 hydrogen, 1 chlorine | Na ₂ CO ₃ | | 2CH₃COOH | |
| Al ₂ O ₃ | | 2MgSO ₄ | | 3Al ₂ (SO ₄) ₃ | |
| CaCl ₂ | | NH ₃ | | KBr | |

(8 marks)

Q2. Balance the following equations.

1 mark will be awarded in case of completely correct equation.

(i)
$$C_2H_4 + O_2 \longrightarrow CO_2 + H_2O$$

(ii) ____ Fe + ___
$$O_2 \longrightarrow$$
 ___ Fe_2O_3

(iii)
$$H_2SiCl_2 + H_2O \longrightarrow H_8Si_4O_4 + HCI$$

(iv) _____
$$C_5H_8O_2$$
 +____ NaH + ____ HCl \longrightarrow ____ $C_5H_{12}O_2$ + ____ NaCl

(vi)
$$__AgI + __Na_2S \longrightarrow __Ag_2S + __NaI$$

(vii)
$$_$$
__Na₃PO₄ + $_$ _HCl \longrightarrow ___NaCl + $_$ _H₃PO₄

(viii)
$$_$$
 CaCl₂ + $_$ Na₃PO₄ \longrightarrow Ca₃(PO₄)₂ + $_$ NaCl

(ix)
$$_$$
 Mg(OH)₂ + $_$ HCl \longrightarrow MgCl₂ + $_$ H₂O

(x) ____FeS + ___O₂
$$\longrightarrow$$
 ____Fe₂O₃ + ___SO₂

(xi)
$$V_2O_5 + HCI \longrightarrow VOCI_3 + H_2O$$

(xii) _____
$$Hg(OH)_2 +$$
____ H_3PO_4 ____ $Hg_3(PO_4)_2 +$ ____ H_2O

(12 marks)