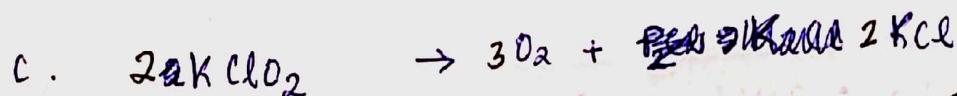
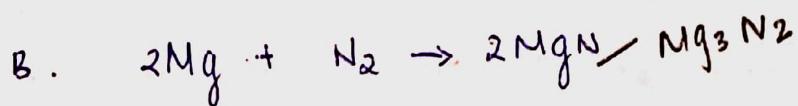
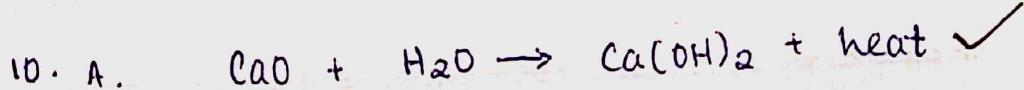


Revision - Chemistry - Test 01

1. (B) Exothermic ✓
2. (B) $\text{CaCO}_3 + 2\text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O} + \text{CO}_2$ ✗ (A)
3. (B) 2, 3, 1, 3 ✓
- $$2\text{Al} + 3\text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + 3\text{H}_2$$
- | | | |
|-----------------|----------------|----|
| Al | R | P |
| Al | K ₂ | 2 |
| H | 26 | 26 |
| SO ₄ | X 3 | 3 |
4. ~~(B)~~ (C) Both A & B ✗ (A)
5. (C) (B) $\text{Pb}(\text{NO}_3)_2(\text{aq}) + \text{Na}_2\text{SO}_4(\text{aq}) \rightarrow \text{PbSO}_4(\text{s}) + 2\text{NaNO}_3(\text{aq})$ ✗ (C)
6. (C) $\text{HCl} + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{HNO}_3$ ✗ (A)
7. (A) reducing agent. ✗ (B)
8. 10⁸: A. The lime water turns milky. This often used to test the presence of CO₂. ✓
- B. The lime water and carbon dioxide combine to form ~~carbon~~ calcium carbonate and water. (1)
- $$\text{Ca}(\text{OH})_2 + \text{CO}_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O}$$
9. A. $2\text{Pb}(\text{NO}_3)_2 + 4\text{KI} \rightarrow 4\text{KNO}_3 + 2\text{PbI}_2$ ✓ (1/2)
- B. The precipitate is yellow in colour. Lead iodide is the ✓

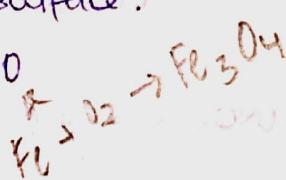
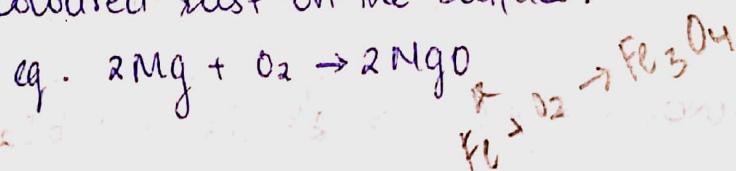
precipitate.



II. A chemical reaction is endothermic when it absorbs energy. For example, decomposition reactions. Photochemical decomposition involves absorption of light energy, whereas thermal decomposition involves absorption of heat energy. Hence, they are endothermic reactions. ✓

12. A redox reaction is one in which both ~~oxidation~~ oxidation and reduction occurs ~~at~~ simultaneously, which means, a compound loses an electron ~~and~~ and is ~~oxidised~~ oxidised and the same time, ~~another~~ the other compound gains an electron ~~and~~, reduction occurs. ✓

13. Rusting occurs when a metal comes in contact with atmospheric ~~and~~ moisture. It develops a reddish brown coating, most metals do. Some metals like copper develop a greenish coating. It can be prevented by painting the metals, greasing the metals and the use of sandpaper ~~as~~ can remove the coloured rust on the surface. ✓



14. Rancidity refers to oxidation of fatty and oily foods which results in bad odor and taste from the food. It spoils the food. It can be prevented by the use of nitrogen, helium and antioxidants like BHA and BHT. This is why chips packets are flushed with nitrogen. ✓

15. Any reaction in which a reactant reacts with oxygen is referred to as combustion. In respiration, we take in oxygen and give out carbon dioxide. ✓