

1. A: $\text{CaCO}_3 \xrightarrow{\text{heating}} \text{CaO} + \text{CO}_2$
R: Metal carbonates on heating produce carbon dioxide and corresponding metal oxides.
2. A: Glass shatters easily on impact.
R: Glass is a crystalline solid which is obtained by rapidly cooling it from its liquid state.
3. A: Chromium is coated over iron objects.
R: This is done to prevent the rusting of iron.
4. A: Physical changes can be brought about by both contact and non-contact forces.
R: Physical changes involve rearrangement of atoms but does not impact the chemical properties of the material.
5. A: When concentrated sulphuric acid is added to sugar, it results in a dark, black column.
R: Hydrophilic Sulphuric acid absorbs the H_2O molecules in the sugar, leaving behind Carbon.
6. A: When a piece of copper is dropped in a solution of Silver Nitrate, it retains its colour.
R: Copper displaces silver in the above situation
7. A: Emission of any type of energy is a confirmed sign of both physical and chemical reactions.
R: Examples include emission of microwaves by microvens, burning of magnesium ribbon etc.
8. A: Decomposition reactions are brought out by heating, light or electricity.
R: Decomposition of AgCl is an example of such reaction.
9. A: Reactivity[Zinc > Lead]
R: Tiny crystals of lead form when a piece of zinc is dropped in a lead nitrate solution.
10. A: Anhydrous CuSO_4 doesn't have any water of crystallization.
R: Anhydrous CuSO_4 is used for absorption of water.

11.A: The vegetative propagation method of producing potato plants by using "potato tuber cutting' is much faster than the production of potato from seeds.

R: Each potato plant produces more than one tuber, a cut part of a potato tuber with a bud can grow into a new potato plant.

12. A: Begonia plant reproduces by vegetative propagation by leaves.

R: Leaves of begonia has buds on it.

13. A: The new plants produced by vegetative propagation are different from the parent plant.

R: Plants are produced from a single parent during Vegetative propagation.

14. A: Flowers are the reproductive part of the plant.

R: Flowers are obtained from the sexual reproductive parts of a plant

15. A: sweet potato and ginger can be grown without Seeds.

R: Potato plant onlyt sprouts from an" eye".