

Chemistry Science Questions for CDS, CGL Tier-1, Railways and SSC 10+2 Exams

Chemistry Quiz 6

Directions: Study the following questions carefully and answer the questions given below.

1. Which of the following is a displacement reaction? A. $C + O_2 \rightarrow CO_2$ **B.** $FeSO_4 \rightarrow Fe_2O_3 + SO_2 + SO_3$ **C.** $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$ **D.** $H_2 + O_2 \rightarrow H_2O$

2. Silver chloride in the presence of sunlight turns into a specific color. What is that color?

A. Black B. Blue C. Grey D. Red

3. Which gas is added in a bag of chips to prevent its oxidation?A. Carbon dioxide**B.** Nitrogen**C.** Helium**D.** Ammonia

4. Which of the following statements is true?

A. Reduction is the removal of hydrogen

- **B.** Oxidation is the removal of hydrogen
- C. Reduction is the addition of oxygen
- **D.** Oxidation is the addition of hydrogen

5. What is the PH range of our body? **A.** 7-7.8 **B.** 6-7 **C.** 8-9 **D.** 9-10

6. What is the chemical name of baking soda?

A. Sodium hydrogen carbonateB. Sodium carbonateC. Calcium phosphateD. Calcium sulphate

7. Sodium explodes, catches fire in the presence of water. It even explodes because of moisture in the air. It is kept in a specific oil to prevent its explosion. Which of the following oil is used for the same?
A. Mustard oil B. Kerosene oil C. Coconut oil D. Avocado oil

8. Which of the following is not an alloy?

A. Steel B. Brass C. Bronze D. Iron

9. Which of the following methods is suitable for preventing iron from rusting?
A. Applying grease B. Applying paint C. Applying a coating of zinc

A. Applying greaseB. Applying paintC. Applying a coating of zincD.All of the above

10. What is the nucleus of a atom made of?A. Protons only B. Electrons only C. Protons and electrons onlyD. Protons and neutrons



| Correct Answers: | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| С | С | В | В | Α | Α | В | D | D | D |

Explanations:

1.

Silver chloride (AgCl) in the presence of sunlight breaks down into Ag(grey color) and chlorine gas. This is a specific example of decomposition reaction.

AgCl(In the presence of sunlight) \rightarrow Ag + Cl₂

Hence, option C is correct.

2.

Combination reaction- A reaction in which a single product is formed from two or more reactants is known as combination reaction. A and D are example of a combination reaction.

Decomposition reaction- A reaction in which a product gets decomposed into 2 or more different products. B is an example of decomposition reaction.

Displacement reaction- When a metal replaces another metal in a solution, it is known as displacement reaction. In (C), Fe replaces Cu from CuSO4.

Hence, option C is correct.

3.

When fat and oils are oxidized, they become rancid and their smell and taste change. Therefore, substances which prevent oxidation are added to foods containing fats and oils. Therefore, nitrogen gas is used to prevent the oxidation of chips in a packet.

Hence, option B is correct.

4.

Only option B is correct here.

Oxidation is defined as the removal of hydrogen or the addition of oxygen.

Reduction is defined as the removal of oxygen or the addition of hydrogen.

5.

The PH range of our body is 7-7.8 i.e it is mostly basic. The acidity and basicity is defined in terms of PH. If PH lies in the range 1-7, it is considered acidic in nature. If PH range lies above 7, it is considered basic in nature.

Hence, option A is correct.

6.

The chemical name of baking soda is sodium hydrogen carbonate (NaHco3). It is also known as sodium bicarbonate.

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Sodium carbonate is the chemical name of washing soda. (Na2co3).

Hence, option A is correct.

7.

Reaction of sodium with water is an exothermic reaction. Sodium hydroxide and hydrogen gas are formed as products. It is a highly exothermic reaction. Therefore, sodium is kept in kerosene oil to prevent its interaction with air as it reacts even with the moisture present in air.

Hence, option B is correct.

8.

An alloy is a substance which is formed by combining two or more metallic elements, especially togive greater strength or resistance to corrosion. Steel, brass and bronze are all alloys. Steel is a mixture of iron and carbon. Brass is an alloy of copper and zinc. Bronze is an alloy of copper and tin.

Iron is a pure metal.

Hence, option D is correct.

9.

Rusting of iron is a process wherein iron reacts with oxygen in the atmosphere to form fe2o3. This forms a reddish, brown layer on the surface of the iron. Hence, some of the ways which are applied to prevent this are 1) Applying grease 2) applying paint 3) applying a coating of zinc.

Hence, option D is correct.

10.

The nucleus of an atom consists of protons and neutrons only. Electrons revolve around the nucleus and are not present in the nucleus.

Hence, option D is correct.





