

Chemistry Science Questions for CDS Exams

Chemistry Quiz 5

Direction : Study the following question carefully and choose the right answer.

1. Which one of the following metals is less reactive than hydrogen?

A. Barium B. Copper C. Lead D. Magnesium

2. Which one of the following substances is made from natural raw materials?

A. Rayon B. Nylon C. Polyester D. Polystyrene

3. An a-particle consists of which of the following?

A. 2 protons and 2 neutrons B. 1 proton and 1 electron

C. 2 protons and 4 neutrons D. 1 proton and 1 neutron

4. Which of the following isotopes of carbon is/are used in carbon dating?

A. $_6C^{12}$ only B. $_6C^{13}$ only C. $_6C^{14}$ only D. $_6C^{12}$ and $_6C^{14}$

5. Which one of the following is involved for desalination of sea water?

A. Reverse osmosis

B. Simple osmosis

C. Use of sodium aluminum silicate as zeolite

D. Use of ion selective electrodes

6. Which of the following metals are present in hemoglobin and chlorophyll, respectively?

A. Fe and Mg B. Fe and Zn C. Mg and Zn D. Zn and Mg

7. The tracking of people by trained dogs is based on the recognition of which of the following compounds in the sweat from feet?

A. Carboxylic acids B. Uric acid C. Sugar D. Salt

8. German silver is an alloy of

A. Gold and silver B. Copper and silver C. Copper, zinc and silver

D. Copper, zinc and nickel

- 9. 'Freon' used as refrigerants, is chemically known as
- A. Chlorinated hydrocarbon B. Fluorinated hydrocarbon

C. Chlorofluoro hydrocarbon D. Fluorinated aromatic compound

10. In which categories did Marie Curie win her two different Nobel prizes?

A. Physics and Chemistry B. Chemistry and Medicine C. Physics and Medicine

D. Chemistry and Peace

Correct Answers:

1	2	3	4	5	6	7	8	9	10
В	А	А	С	А	А	А	D	С	А

Explanations:

1.

In the reactivity series of metals, copper is placed below the hydrogen hence, it is less reactive than hydrogen. On the other hand barium, lead and magnesium are placed above the hydrogen hence, these are more reactive than hydrogen.

The metals copper, silver, gold and platinum are less reactive than hydrogen because they do not replace hydrogen from water or acid.

Examples for metal-displacement reactions: Zinc can displace copper from copper sulphate solution and iron from ferrous sulphate solution. So zinc is more reactive than iron and copper.

2.

Rayon is a textile, made from natural raw materials like cellulose. These are of two

types, both made from wood pulp. Rayon is also called artificial silk.

3.

An a-particle is identical with helium nuclei. It consists of 2 protons and 2 neutrons and represented by 2He4.

4.

The isotope of carbon ${}_{6}C^{14}$ is used in radio carbon dating.



5.

Reverse osmosis method is used to obtain pure water from water containing a salt or for desalination of sea water.



6.

Fe and Mg metals are present in hemoglobin and chlorophyll respectively.

7.

The tracking of people by trained dogs is based on the recognition of carboxylic acid in the sweat from feet.

8.

German silver is an alloy of copper (25-50%), zinc (25-35%) and nickel (10-35%). It is used in utensils and resistance wire.

9.

Chlorofluoro carbon (CF_2CI_2) is also known as freon. It is used as refrigerants in refrigerators and air conditions. It is also used as a propellant in aerosols and foams.

10.

Marie Curie win her two different Noble prizes in two different categories i.e., physics and chemistry for the discovery of radium and polonium.



