

## Chemistry Questions for CDS, CGL Tier 1, SSC 10+2 and Railways Exam.

## **Chemistry Quiz 11**

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

1. Which of the following is a polymer of chloroethene?												
A. Polyvinyl chloride (F	nyl chloride (PVC) B. Nylo		C. Terylene	D. Polystyrene								
2. Which of the following is the lowest layer of the atmosphere?												
A. Stratosphere	B. Tropospher	re	C. Mesosphere	D. Exosphere								
3. Which of the following is the most used semiconductor?												
A. Silicon	B. Lead		C. Aluminium	D. Nickel								
4. Which of the following is not an ore of aluminium?												
A. Bauxite	B. Feldspar		C. Cryolite	D. Dolomite								
5. Which of the following does not form an acidic oxide?												
A. Fluorine	B. Sulphur	nar	C. Carbon	D. Sodium								
6. What is the shape of a molecule of water?												
A. Bent	B. Linear	upurcat	C. Trigonal pyramida	al D. Octahedral								
7. Which of the following is a noble gas ?												
A. Krypton	B. Astatine		C. Fluorine	D. Chlorine								
8. Which of the following is true regarding the periodic table?												
<ul> <li>A. As we move down the group the size of an atom decreases</li> <li>B. As we move across the table, the size of an atom decreases</li> <li>C. As we move down the group, electronegativity increases</li> <li>D. As we move across the table, electronegativity increases</li> </ul>												
9. A neutral atom has 9 electrons and mass number is 19. What is the number of neutrons in the atom?												
A. 11	B. 10	C. 9	D. Cannot be	edetermined								
<b>10. Gobar gas cont</b> A. Methane	<b>ains mainly which</b> B. Ethane	<b>of the follo</b> C. Propanal	wing component? D. Ethanol									

**Correct Answers:** 

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

## **Explanations:**

**1.** A polymer is a substance which is made up of monomers. Here, the polymer of chloroethene is PVC. The monomer of nylon is caprolactam, terylene are ethylene glycol and terephtalic acid and the monomer of polystyrene is styrene.

Hence, option A is correct.

**2.** The lowest layer of the atmosphere is troposphere. The layers are in the following order. Troposphere, stratosphere, mesosphere, thermosphere, exosphere. Hence, option B is correct.

**3. Semiconductor** – A solid substance that has a conductivity between that of an insulator and that of most metals, either due to the addition of an impurity or because of temperature effects. Devices made of semiconductors, notably silicon, are essential components of most electronic circuits. Hence, option A is correct.

**4.** An ore is a naturally occurring solid material from which a metal or valuable mineral can be extracted profitably. Dolomite is an ore of magnesium. All others are ore of aluminium. Hence, option D is correct.

**5.** Acidic oxides are the oxides of non- metals and basic oxides are the oxides of metals. Fluorine, sulphur and carbon are all non- metals and therefore form basic oxides. Sodium is a metal and therefore forms basic oxide. Amphoteric oxides (both acidic and basic in nature) are also formed by some of the elements. Examples include Aluminium.

Hence, option D is correct.

**6.** The shape of a water molecule is bent owing to the presence of an electron pair. Hence, option A is correct.

**7.** Krypton is a noble gas in the above options given. Noble gases are also known as inert gases as their outermost shell is fully filled and therefore their reactivity is very low. All other gases are halogens. Other noble gases are helium, neon, argon, krypton, xenon and radon. Hence, option A is correct.

8. There are various trends in a periodic table which are followed except some exceptions here ans there.
Some of the important trends being
The size increases as we move down the group
The size decreases as we move across the table
The electronegativity decreases as we move down the table
The electronegativity increases as we move across the table
Hence, option D is correct.

**9.** Mass number of an atom is defined as the sum of protons and neutrons present in the nucleus. Since, the number of electrons are 9 and the atom is neutrons, therefore number of protons will also be equal to 9. Mass number is equal to protons + neutrons=19. Putting protons as 9, we get number of neutrons as 10. Hence, option B is correct.

**10.** Gobar gas mainly contains methane. Biogas typically refers to a mixture of different gases produced by the breakdown of organic matter in the absence of oxygen. Biogas is primarily methane( $CH_4$ ) and carbon dioxide ( $CO_2$ ) and may have small amounts of hydrogen sulphide ( $H_2S$ ), moisture and siloxanes. Hence, option A is correct.



