

Chemistry - 12th Class Chemistry Chapter 7 Short Questions Preparation

Q1. What is meant by Carbonization?

Ans 1: Coal in nature was formed from the remains of the trees buried inside the earth crust some 500 million ago. Due to the bacterial and chemical pressure inside the earth crust, peat got transformed into coal. This process is called Carbonization of coal.

Q2. Define function group. Give two examples of functional groups containing oxygen?

Ans 1: An atom or a group of atoms or a double bond or triple bond whose presence imparts specific properties to organic compounds is called a functional group, because they are chemically functional parts of a molecule.

Q3. Give an idea about knocking in the internal combustion engine.

Ans 1: The gasoline fraction present in petroleum is generally not of good quality. When it burns in an automobile engine, combustion can be initiated before the spark plug fires. This produces a sharp metallic sound called knocking which greatly reduces the efficiency of an engine.

Q4. Why is the vital force theory rejected?

Ans 1: The vital force theory was rejected by Friedrich Wohler when he synthesized urea, an organic compound, from ammonium cyanate, a substance of known mineral origin. Since the synthesis of urea from ammonium cyanate, millions of organic compounds have been prepared and analyzed.

Q5. Define functional group isomerism.

Ans 1: An atom or group of atoms or a double bond or a triple bond whose presence imparts specific properties to organic compounds is called a functional group because they are chemically functional parts of molecules.

Q6. Write a brief note on geometric isomerism?

Ans 1: Such components which possess the same structural formula, but differ with respect to the position of the identical groups in space are called geometric isomers, and the phenomenon is known as geometric isomerism. Two carbon atoms joined by a single bond are capable of free rotation about it. However, when two carbon atoms are joined by a double bond, they cannot rotate freely. As a result, the relative and give rise to cis-trans isomers.

Q7. What is metamerism?

Ans 1: Isomerism arises due to the unequal distribution of carbon atoms on either side of the functional group. Such compounds belong to the same homologous series.

Q8. Octane number of gasoline is improved by reforming.

Ans 1: The octane number of gasoline is improved by a process called reforming. It involves the conversion of straight hydrocarbons into branched chain by heating in the absence of oxygen and in the presence of catalyst.

Q9. What are carbocyclic compound?

Ans 1: The compound in which the ring consists only carbon atom is called the carbocyclic compound.

Q10. What are fused rings aromatic compounds?

Ans 1: The aromatic compounds in which two or more than two benzene rings are fused together are called fused aromatic compounds.
