

## Chemistry - 12th Class Chemistry Chapter 14 Short Questions Preparation

Q1. What is chemical nature of enzyme? Classify them.

**Ans 1:** Enzymes are either pure proteins or contain proteins as essential components and in addition require non protein component which are essential for their activity. The protein components of the enzyme is called apoenzyme and the non protein component is called co factor or co factor or co enzyme. The cofactor include inorganic ions and complex organic metallo organic molecules.

Q2. What is copolymer?

**Ans 1:** Copolymer is formed by the polymerization of two monomers together e.g. vinyl acetate reacts with butyl maleate to give a copolymer.

Q3. How polystyrene is prepared..

**Ans 1:** Polystyrene is prepared by the polymerization of styrene in the presence of a catalyst.

Q4. Write a note on Cholesterol?

**Ans 1:** It is the most abundant animal sterol occur in all animals tissues but it is only in a few higher plants. Cholesterol is present both in the free as well as esterified form in the blood, animals tissues, egg and yolk, various and fat and nerve tissue.

Q5. Discuss effect of temperature and pH on enzyme activity?

**Ans 1:** The enzymatic reaction occurs best at or around 37 Degree which is the average normal body temperature. The rate of chemical reaction is increased by a rise in temperature but this is only over a limit range of temperature. The enzymes usually destroyed at high temperature, the activity of enzyme is reduced at low temperature. The temperature at which an enzyme reaction occurs the fastest is called its optimum temperature.

Q6. Write down important use of lipids?

**Ans 1:**

1. Lipids are good source of energy and make the food more palatable.
2. Lipids exert an insulating effect on the nervous tissues.,
3. Lipids are good energy reservoirs in the body,

Q7. What is Rancidity of fats or oils?

**Ans 1:** Fats or oils are liable to spoilage and give off an odour known as rancidity. It is mainly caused by the hydrolytic or oxidation

reaction which release foul smelling aldehydes and fatty acids,

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Q8. What are polyamide resin?

**Ans 1:** These resins are formed by the condensation of polyamines with adipic dicarboxylic acid. One of the most famous condensation polymers discovered is Nylon.

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Q9. Give the classification of polymer?

**Ans 1:** IN 1929, W.H Carothers suggested a classification of the polymerization process into two depending upon the way the polymer are formed.

Addition Polymerization: It is free radical addition reaction which involves initiation, propagation and termination steps. For example polymerization of styrene.

Condensation polymerization: The polymerization results from the mutual reaction of two functional groups, This reaction usually involves the removal of a water molecule or a methanol molecule, It takes place at the both end of the growing chain.

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Q10. Name different types of proteins on the basis of physico-chemical properties.

**Ans 1:** Based on physical chemical properties, proteins may be classified into three types.

1. Simple proteins
2. Compounds or conjugated proteins
3. Derived proteins

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