

Chemistry - 12th Class Chemistry Chapter 15 Short Questions Preparation

Q1. Just write five stage in the manufacturing of Portland Cement?

Ans 1:

1. Crushing and Grinding
2. Mixing of the raw material
3. Heating the slury in a Rotary Kiln
4. Clinker formation
5. Grinding the clinker with gypsum.

Q2. What is meant by Dry cleaning in Paper manufacturing?

Ans 1: Wheat straw is collected from the storage and is then set for dry cleaning ,For this purpose air is blown into the raw material,which removes unwanted particles.

Q3. Define the term paper.

Ans 1: It is defined in term of its method of production,that is a sheet material made up of a network of natural cellulosic fibres which have been deposited from an aqueous suspension The product obtained is a network of interwinning fibres.

Q4. Why wet cleaning is done in paper manufacture?

Ans 1: Wet cleaning removes the remaining dust particles,and the soluble materials get dissolved in water.

Q5. How lignin is removed from paper?

Ans 1: The pulp is washed with required amount of water soluble lignin and coloured compound,Lignin is an aromatic polymer and cause paper to become brittle,It is then thickened finally stored in high density storage tower.

Q6. How digestion process is carried out in paper industry?

Ans 1: From wet digestion,the material is sent to digester ,The digester is usually 10 meters in length and 2 meters in diameter,it is made of steel and wrought iron,This is the main unit of process,The digestion process can be either batch or continuous.As the raw material enter into digester steam is introduced at the bottom and a liquor containing sodium sulphate is injected simultaneously to cover the raw material.

Q7. What is phosphatic fertilizer?

Ans 1: The fertilizer provide phosphorus to the planet or soil ,Various phosphate fertilizer have different compositions,The most

important water soluble fertilizer are super phosphate and triple phosphate .

Q8. Define cement. Give its essential components.

Ans 1: Cement is the material obtained by burning an intimate mixture of calcareous and argillaceous material at sufficiently high temperature to produce clinkers. These clinker are the ground to a fine powder.'

Essential components of cements:

1. Calcareous material as source of CaO.
 2. Argillaceous material they provide acidic components such as aluminates and silicates.
 3. Gypsum
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Q9. Give percentage of nitrogen in urea , ammonium nitrate, hydrogen phosphate.

Ans 1: Percentage on nitrogen in Urea is 46%

Percentage of nitrogen in ammonium nitrate = 33-33.5%

Percentage of nitrogen in Diammonium hydrogen phosphate = 16%

Q10. Give an idea about Clinker.

Ans 1: The resulting product obtained from the kiln is known as cement clinker, This has the appearance of greenish black or grey coloured balls varying in size from small nuts to peas.
