

## Chemistry - 12th Class Chemistry Chapter 15 Short Questions Preparation

Q1. 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%

Q2. Distinguish micronutrients and macronutrients for plants?

**Ans 1:** Micronutrients : The nutrients which are required in a very small amount for the growth of plants are called micronutrients,These include Boron,Copper ,iron,Manganese,Zinc.

Macronutrients :The nutrients which are required in a large amount for the growth of plants are called macro-nutrients,These include Nitrogen ,Phosphorus ,Potassium,Calcium and Oxygen.

Q3. What do you know about screening operation for pulp and paper industry.

**Ans 1:** In most pulp and paper process some types of screening operation is required to remove the over sized troublesome and unwanted particle,Magnetic separator removed iron pieces like nail and bolts .

Q4. 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.

Q5. Ammonium nitrate is useful fertilizer for many crops except paddy rice,Why?

**Ans 1:** Ammonium nitrate can not be used as fertilizer for paddy rice because the microbial bacteria in flooded fields decomposes it to nitrogen gas.

Q6. Write the important qualities of a good fertilizer?

**Ans 1:** The nutrient elements present in it must be readily available to the plant,It must be fairly soluble in water so that it thoroughly mixes with the soil,It should be cheap,It should not be injurious to plant,It must be stable so that it is available for a longer time to the growing plant.

Q7. Give different zones in the rotary kiln and their temperature.

**Ans 1:** 1.Dying or pre heating zone..

2.Decomposition zone.

3.Burning Zone

4.Cooling Zone

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Q8. Explain the importance of potassium fertilizer.

**Ans 1:** Potassium fertilizer provide potassium to the plant or soil.Potassium is required for the formation of starch,sugar an the fibrous material of the plant,That increase resistance to disease and make the plant more strong by helping in healthy root development,They also help in ripening of seeds,fruits and cereals.

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Q9. Ammonium nitrate can not be used as a fertilizer for paddy rice?Summarize with reason?

**Ans 1:** Ammonium nitrate can not be used as a fertilizer for paddy rice because the microbial bacterial in flooded fields decomposes it to nitrogen gas.

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Q10. Define cement.Give its essential components.

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

Essential components of cements:

1.Calcarious material as source of CaO.

2.Argillaceous material they provide acidic components such as aluminates and silicates.

3.Gypsum

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