

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

Q1. Give the important properties of 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.

Q2. Why nitrogen is important for plants?

**Ans 1:** Nitrogen is required during the early stage of plant growth for the development of stems and leaves. It is the main constituents of protein, impart green colour to the leaves and enhance the yield and quality of the plants.

Q3. Write a short note on diammonium phosphate?

**Ans 1:** This compound of fairly high purity is prepared by continuous process that consists of reacting anhydrous ammonia gas and pure phosphoric acid at 60-70 degree and pH 5.8-6.0.

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 enters into digester, steam is introduced at the bottom and a liquor containing sodium sulphate is injected simultaneously to cover the raw material.

Q5. Distinguish micronutrients and macronutrients for plants?

**Ans 1:** Micronutrients: The nutrient 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.

Q6. Just write five stages in the manufacturing of Portland Cement?

**Ans 1:**

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

---

Q7. 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.

---

Q8. 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.

---

Q9. How clinker is converted into cement?

**Ans 1:** The cement clinker are air cooled and groud with required of gypsum into fine powder.

---

Q10. What is the function of phosphatic fertilizer in plants?

**Ans 1:** Phosphorus is required to stimulate early growth to accelerate the seed and fruit formation during the later stage of growth,It also increase resistance to disease,The various phosphatic fertilizer have different composition due to which they have different solubilities.

---