

Q1 What is chlor alkali process? Why is it named so?  
Write down the reaction involved in this process.

Q2(a) Explain the process of nutrition in Amoeba with suitable diagram.

(b) Name 2 salts that is used in black and white photography. Give reactions when they are exposed to light.

Q3 State Ohm's law? How can it be verified experimentally? Does it hold good under all conditions?  
Comment.

Q4 List three effects of oxidation in our daily life. Are these effects useful or harmful? Justify.

Q5 Express Toule's law of heating mathematically.

Q6 "Sodium hydrogen carbonate is a basic salt."  
Justify this statement. How is it converted into washing soda? Explain.

Q7 (a) Why do we need to balance a chemical equation.

(b) Using the chemical formulae write balanced chemical equations for the following reactions:

(a) Carbon disulphide burns in air to give carbon dioxide and sulphur dioxide.

(b) Potassium metal reacts with water to give potassium hydroxide and hydrogen gas.

Q8 During respiration, pyruvic acid is produced from glucose. State the end products formed from it on further break down in each of the cases:-

(i) Yeast in absence of oxygen.

(ii) Lack of oxygen in muscles

(iii) Presence of oxygen in mitochondria.

Q 9(a) How is sodium hydroxide prepared from common salt? Give the equation.

(b) Give the chemical equation for the formation of baking soda from sodium chloride. What is the action of heat on baking soda?

Q 10(a) Why an ammetre likely to burn out if you connect it in parallel?

(b) Why is series arrangement not found satisfactory for domestic lights?

### Creative work

① Make a chart on different kinds of Decomposition reactions.

② Make a chart/model of structure of human heart.

③ Make a chart on different kinds of Salts - their preparations & uses.

④ Prepare a chart or model <sup>based</sup> on the working of artificial kidney.

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