

CLASS 6 HOTS REVISION QUESTIONS

1. Answer the questions below with the help of the following informations :-
An atom X contains 17 protons, 17 electrons and 18 neutrons; whereas the other element Y contains 11 protons, 11 electrons and 12 neutrons.
 - a) Write the atomic number and mass number of X and Y.
 - b) Write the electronic configurations of X and Y.
 - c) What type of ions will be formed by X and Y?

2. a). Name the metallic ions :-
 - i) Having variable valency and also exhibits +3 valency
 - ii) Do not have variable valency and exhibit +3 valencyb) Name the non-metallic ion which has +1 valency other than hydrogen

3. Two beakers are taken:-
 - a) one beaker A has Copper (II) sulphate solution and iron nails in it.
 - b) Another beaker B has zinc sulphate solution and iron nails in it.
--- If both the beakers are kept undisturbed for few hours, what change will you see in them?
Explain your answer.

4. 'Calorific value of diesel is 45000 KJ/KG'--- What is meant by this statement ?

5. Give reason for the following 'The blue colour of copper(II) sulphate solution remains blue during electrolysis of this solution using copper electrodes.

6. To electrorefine an impure copper metal block, suggest the particular anode and the cathode to be taken and describe in short the observation.

7. a) Discuss the merits and demerits of plastics.
b) Name the fire proof plastic.

8. What will be the name, molecular formula, structural formula and electron diagram of an alkane having 3 carbon atoms.

9. Write the criteria for acid rain and two ways to control it.

10. 'Increased level of nutrients affect the survival of aquatic animals'--Give a reason behind this statement and also mention the name of the resulting effect.