

SAINIK SCHOOL GOPALGANJ
ASSIGNMENTS

CHAPTER-Hydrogen

CLASS-XI

1. Electrolysis of brine produces

- a. chlorine gas
- b. hydrogen gas
- c. sodium hydroxide
- d. all the above

2. A reactant containing the element that is oxidised is called

- a. reducing agent
- b. oxidising agent
- c. hydrogen
- d. sublime

3. By losing one or two electrons the atoms of metal are

- a. oxidised
- b. reduced
- c. hydrogenated
- d. sublimated

4. Electrolytes conduct electricity in

- a. solid state
- b. liquid state
- c. gaseous state
- d. plasma state

5. Loss of hydrogen atoms by an element is called

- a. hydrogenation
- b. oxidation
- c. reduction
- d. sublimation

6. The electrolyte among the following is

- a. NaOH
- b. Urea
- c. glucose

d. benzene

7. O-O-H bond angle in H₂O₂ is

- a. 97°
- b. 106°
- c. 120°
- d. 109°28'

8. Which of the following is very high for proton?

- a. radius
- b. ionization potential
- c. charge
- d. hydration energy

9. The list which contains only elements is

- a. air, water, oxygen
- b. hydrogen, oxygen, brass
- c. air, water, fire, earth
- d. calcium, sulphur, carbon

10. The smallest part of an element that cannot exist as a free state is

- a. ion
- b. charge
- c. atom
- d. molecule

a. VSA type

- b. **11.** What is the reason for the appearance of temporary hardness of water?
- c. **12.** Name a method to remove the temporary hardness of water.
- d. **13.** What are the salts responsible for the permanent hardness of water?
- e. **14.** Give an example of ionic hydride.
- f. **15.** Which isotope of hydrogen is radioactive ?

g. SA type

- h. **16.** Justify the position of hydrogen in the periodic table on the basis of electronic Configuration.
- j. **17.** Why does water have a higher boiling point than that of H₂S?
- k. **18.** Hydrogen peroxide is used to restore the colour of old oil-paintings containing Lead oxide. Write a balanced equation for the reaction that takes place in this process.
- l. **19.** How is the strength of hydrogen peroxide expressed?

- n. 20. Explain with the help of examples as to which property of H_2O_2 is responsible for its bleaching action.