DPP
DAILY PRACTICE PROBLEMS

CLASS : XIIth **SUBJECT : CHEMISTRY**
DATE : **DPP NO. :2**

Topic :-HYDROGEN

1. Which element forms maximum compound in chemistry?
   a) O b) H c) Si d) C

2. The bleaching properties of H_2O_2 are due to its:
   a) Reducing properties b) Oxidizing properties c) Unstable nature d) Acidic nature

3. Which one of the following is called amphoteric solvent?
   a) Ammonium hydroxide b) Chloroform
   c) Benzene d) Water

4. The colour of hydrogen is
   a) Yellow b) Orange c) Black d) Colourless

5. The amount of H_2O_2 present in 1 L of 1.5 $N H_2O_2$ solution is:
   a) 2.5 g b) 25.5 g c) 3.0 g d) 8.0 g

6. H_2O_2 is prepared in the laboratory when:
   a) MnO_2 is added to dilute cold H_2SO_4
   b) BaO_2 is added to CO_2 bubbling through cold water
   c) PbO_2 is added to an acidified solution of $KMnO_4$
   d) Na_2O_2 is added to boiling water

7. Decolourisation of acidified potassium permanganate occurs when H_2O_2 is added to it. This is due to:
   a) Oxidation of $KMnO_4$
   b) Reduction of $KMnO_4$
   c) Both oxidation and reduction of $KMnO_4$
   d) None of the above

8. Which hydride is neutral?
   a) H_2S b) H_2O c) H_2Se d) H_2Te

9. Hydrogen burns with:
   a) Smoky flame b) Yellow flame c) Blue flame d) Pale yellow flame

10. Zeolites are extensively used in:
    a) Softening of water and catalyst b) Preparing heavy water c) Increasing the hardness of water d) Mond's process

11. Deuterium, an isotope of hydrogen is:
a) Radioactive b) Non-radioactive c) Heaviest d) Lightest

12. Which is the lightest gas?
a) Nitrogen b) Hydrogen c) Helium d) Oxygen

13. Temporary harness is caused due to the presence of:
a) $CaSO_4$ b) $CaCl_2$ c) $CaCO_3$ d) $Ca(HCO_3)_2$

14. H_2O_2 is:
a) Diamagnetic b) Paramagnetic c) Ferromagnetic d) None of these

15. Commercial 11.2 volume H_2O_2 solution has a molarity of
a) 1.0 b) 0.5 c) 11.2 d) 1.12

16. The life period of atomic hydrogen is:
a) Only five minute
b) Only one third of a second
c) Only two hour
d) 10 second

17. There is a sample of 20 volume of hydrogen peroxide solution. Calculate its strength
a) 6.07% b) 3.035% c) 2.509% d) 4.045%

18. When the same amount of zinc is treated separately with excess of sulphuric acid and excess of sodium hydroxide, the ratio of volumes of hydrogen evolved is:
a) 1 : 1 b) 1 : 2 c) 2 : 1 d) 9 : 4

19. Atomic hydrogen is obtained by:
a) Electrolysis of heavy water
b) Reaction of water with heavy metals
c) Thermal decomposition of water
d) Passing silent electric discharge through hydrogen at low pressure

20. Which loses weight on exposure to the atmosphere?
a) Concentrated H_2SO_4
b) Solid NaOH
c) A saturated solution of CO_2
d) Anhydrous sodium carbonate