

CLASS : XIIth

DATE :

SUBJECT : CHEMISTRY

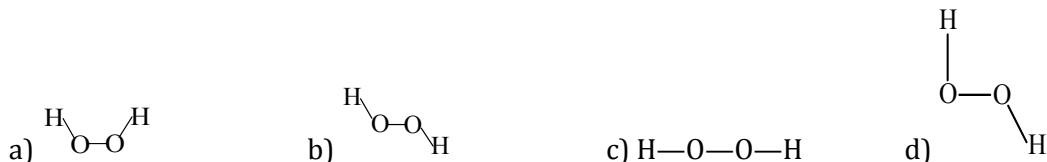
DPP NO. :8

Topic :-HYDROGEN

- The strength of 10 volume of H_2O_2 solution is
a) 10 b) 68 c) 60.70 d) 30.36
- The conversion of atomic hydrogen into ordinary hydrogen is:
a) Exothermic change
b) Endothermic change
c) Nuclear change
d) Photochemical change
- Para hydrogen is:
a) Less stable than ortho hydrogen
b) More stable than ortho hydrogen
c) As stable as ortho hydrogen
d) None of the above
- Some statements about heavy water are given below:
(i) Heavy water is used as a moderator in nuclear reactors
(ii) Heavy water is more associated than ordinary water
(iii) Heavy water is more effective solvent than ordinary water
Which of the above statements are correct?
a) (i) and (ii) b) (i), (ii) and (iii) c) (ii) and (iii) d) (i) and (iii)
- H_2O_2 acts as a reducing agent in its:
a) Reaction with a ferrous salt
b) Reaction with iodides
c) Reaction with lead sulphide
d) Reaction with $KMnO_4$ in acidic medium
- When hydrolith is treated with water it yields:
a) H_2 b) H_2O_2 c) N_2 d) NaH
- Atomic hydrogen produces formaldehyde when it reacts with:
a) CO_2 b) CO c) O_2 d) C_2H_2
- K_a for H_2O_2 is of the order of:

- a) 10^{-12} b) 10^{-14} c) 10^{-16} d) 10^{-10}
9. Which one of the following reaction does not form gaseous product?
- a) $\text{PbO}_2 + \text{H}_2\text{O}_2 \rightarrow$ b) Acidified $\text{KMnO}_4 + \text{H}_2\text{O}_2 \rightarrow$
 c) $\text{PbS} + \text{H}_2\text{O}_2 \rightarrow$ d) $\text{Cl}_2 + \text{H}_2\text{O}_2 \rightarrow$

10. The structure of H_2O_2 is:



11. Which cannot be oxidised by H_2O_2 ?

- a) Na_2SO_3 b) PbS c) KI d) O_3

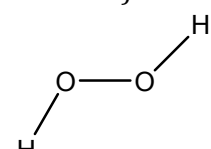
12. A mixture of hydrazine and 40 to 60 per cent of H_2O_2 solution is:

- a) Antiseptic b) Rocket fuel c) Germicide d) Insecticide

13. Hydrogen peroxide is now generally prepared on industrial scale by the:

- a) Action of H_2SO_4 on barium peroxide
 b) Action of H_2SO_4 on sodium peroxide
 c) Electrolysis of 50% H_2SO_4
 d) Burning hydrogen in excess of oxygen

14. The equilibrium molecular structure of hydrogen peroxide is

- a) Planar as given below
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- b) Linear
- c) Tetrahedral
- d) Non-planar

15. A given solution of H_2O_2 is 30 volume. Its concentration in terms of molarity is:

- a) 9.1 M b) 2.68 M c) 2.5 M d) 26.8 M

16. H_2O_2 turns an acidified solution of to orange red.

- a) BaO_2 b) PbO_2 c) Na_2O_2 d) TiO_2

17. Tritium is obtained by:

- a) Nuclear reactions
 b) Passing steam over heated C
 c) Action of NaOH on Al
 d) Action of H_2SO_4 on Zn

18. In the case of H_2O_2 , the angle between the planes containing the hydrogen atom is:

- a) 100 b) 90 c) $109^\circ 28'$ d) 180

19. In laboratory, H_2O_2 is prepared by

- a) Cold $\text{H}_2\text{SO}_4 + \text{BaO}_2$
- b) $\text{HCl} + \text{BaO}_2$
- c) conc $\text{H}_2\text{SO}_4 + \text{Na}_2\text{O}_2$
- d) $\text{H}_2 + \text{O}_2$

20. The formula of heavy water is:

- a) H_2O^{18}
- b) D_2O
- c) T_2O
- d) H_2O^{17}

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