

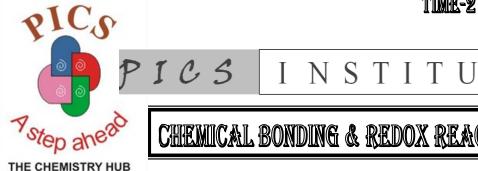
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- 1. Compare the dipole moment of NH3 & NF3 . Explain it?
- 2. Which out of H_2O & H_2S possess higher Bond angle & Why .
- 3. Give LCAO treatment for M.O.T.
- 4. Arrange followings in the order of stability and magnetism. Also Explain it - O_2 , Peroxide ion (O_2^{-2}) , Super oxide ion (O_2^{-1}) , O_2^{+}
- 5. Explain the structure of Acetylene.
- 6. How PCl₅ undergo dissociation. Explain?
- 7. What is meant by Hydrogen Bonding? Why ice floats on water?
- 8. Explain structure of SF₄. Why one pair occupy Equatorial position & not axial?
- 9. Predict any change in hybridization as we move from - $NH_3 + BF_3 \rightarrow [NH_3 \rightarrow BF_3]$
- 10. Why SF₆ is less reactive?
- 11. Why Density of Ice is maximum at $4^{\circ}C$?
- 12. Define Oxidation and reduction in terms of Oxidation number?
- 13. What are disproportionating agent? Which out of H₂SO₄ & H₂SO₃ act as disproportionating agent & why?
- 14. What is salt bridge? write advantages of salt bridge.
- 15. Find Oxidation number of underlined species in following -
 - (a) $K_4[Fe(CN)_6]$
- (b) $\underline{Cr}O_5$ (c) \underline{C}_6 H ₁₂ O ₆

- 16. Predict the oxidizing & reducing nature of following HNO_2 , H_2S , H_2SO_4
- 17. Calculate e.m.f of the cell- $Cr|Cr^{3+}$ (0.1M) ||Fe²⁺ (0.01M) | Fe, Given: $E^{\circ}_{Cr}^{2+}/_{Cr} = -0.75 \text{ V}$: $E^{\circ}_{Fe}^{2+}/_{Fe} = -0.45 \text{ V}$.
- 18. Write a short Note On S.H.E?
- 19. Which of the following is possible to store -
 - (a) ZnSO₄ in Cu vessel.
 - (b) AgNO₃ in Zn vessel.
- 20. Balance following redox reaction -
 - (a) Sn + $NO_3^- \rightarrow Sn^{+2} + NH_4^+$ acidic
 - (b) $Fe(OH)_2 + H_2O_2 \rightarrow Fe(OH)_3 + H_2O$ basic

Send your answer sheets by Post on following address

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