

Gaining Apex Coaching Centre

(Where Toppers make..... Toppers)

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(10+1 CHEMISTRY)

Chemical Bonding (Assignment -I)

- 1) Out of sigma and pi bond which is stronger and why?
- 2) Explain Hybridization. SP^2, SP^3, SP
- 3) Define resonance
- 4) Why CCl_4, CO_2 have zero dipole moment
- 5) Explain the Geometry of water, ammonia and PCl_5 molecule
- 6) Write and explain the geometry of $SF_4, IF_7, SO_2, PCl_3, CO_2$ and Carbonate ion
- 7) Differentiate between Anti bonding and bonding orbital
- 8) Out of NH_3 and NF_3 which has higher dipole moment
- 9) What are the favourable condition for writing resonating structures
- 10) How we can predict the nature and shape of molecule using the concept of dipole moment
- 11) What are the conditions for the combinations of atomic orbitals
- 12) Predict the shape of $BeCl_2, SiCl_4, AsF_5, PH_3$ on the base VSEPR theory
- 13) Write the resonating structures of NO_3^-, CO_3^{2-} and SO_3
- 14) Why BeH_2 molecule has zero dipole moment although Be-H bond is polar
- 15) Is there any change in the hybridization of B and N atoms as a result of the following reaction $BF_3 + NH_3 \rightarrow F_3B.NH_3$
- 16) Out of Hydrogen bond and weak vander waal forces which is stronger and Why?
- 17) How VBT differs from lewis concept
- 18) Out of OCS and CS_2 which has higher dipole moment
- 19) Which of the following species has greater polarizing power
 - i) Fe^{3+} or Fe^{2+} ii) Cu^{2+} or Na^+
- 20) Which of the following species is most susceptible to polarization
 - i) Br^{--} or I^{--} ii) O^{2--} or S^{2--} iii) N^{3--} or O^{2--}
- 21) Discuss the shape of CO_2 on the base of hybridization