# Worksheet: Chemical Bonding and Molecular Structure

Punjab State Board · Class 11 · Chemistry · 5 questions · 14 marks

Name: _____ Date: _____ Score: _____ / 14

**Q1.** Determine the hybridisation and shape of SF4. *[3 marks]*

**Q2.** Why is H2O bent but CO2 linear? *[3 marks]*

**Q3.** Why does water have a higher boiling point than H2S? *[2 marks]*

**Q4.** Calculate the bond order of O2 2- (peroxide ion) and predict its magnetic behaviour. *[3 marks]*

**Q5.** Explain why O2 is paramagnetic using molecular orbital theory. *[3 marks]*