

Quadrant IV- Assessment (Module-wise)

Programme: Bachelor of Science (Third Year)

Subject: Chemistry

Paper Code: CHC 108

Paper Title: Physical Chemistry

Unit: Quantum Chemistry

Module Name: Bonding and antibonding molecular orbitals

Module No: 14

Name of the Presenter: Dr. Apurva A. Narvekar

Self assessment Questions

1. Give main points of difference between BMO and ABMO
2. Write expressions for bonding and antibonding molecular orbital wave functions in terms of the two combining atomic orbital wave functions Ψ_A and Ψ_B .
3. Discuss graphically the variation of electron probability density for BMO and Ψ_A^2 and Ψ_B^2 along the internuclear axis.
4. How electron probability density varies with internuclear distance? Represent these graphically.