

## B,C,D Class

Chapter	Topic	Summary topics	Problems
3	Atomic Shells and Classical Models of Chemical Bonding	Electron Pair Bonds and Lewis Diagrams for Molecules	85, 90, 93, 101, 104
		The Shapes of Molecules : Valence Shell Electron-Pair Repulsion Theory	
4	Introduction to Quantum Mechanics	The Bohr Model : Predicting Discrete Energy Levels in Atoms	45, 49, 51, 57
		The Schrodinger Equation	
5	Quantum Mechanics and Atomic Structure	Quantum-mechanical description of the hydrogen atom	43, 48, 51, 54, 58
		Shell model for many-electron atoms	
6	Quantum Mechanics and Molecular Structure	Molecular orbital theory	65, 68, 70, 71, 73
		LCAO and VB method	
12	Thermodynamic processes and Thermochemistry	Thermochemistry	67, 68, 75, 80, 91
		Ideal Gas Processes	
13	Spontaneous Processes and Thermodynamic Equilibrium	Entropy	41, 42, 44, 57, 63
		Spontaneity of chemical reactions	
17	Electrochemistry	Cell potentials and the Gibbs Free Energy	74, 77, 82, 83, 95
		Batteries and Fuel Cells	
18	Chemical Kinetics	Rate Laws	53, 60, 61, 64, 72
		Reaction Mechanisms and Rate	