

PHYSICS 220 : GROUP THEORY
PROBLEM SET #5

- [1] Complete Tab. 6.6 for the case of 5^- (h) atomic orbitals.
- [2] Find how atomic s, p, d, and f levels resolve in a hexagonal D_{6h} environment.
- [3] Consider a crystal with D_{4h} point group symmetry. Find the number of independent components for first and second rank tensors for such a crystal. Determine their explicit forms.