

### Chapter 10 Problem

1. Assume a  $180^\circ$  domain wall exists in a demagnetized, uniaxial magnetic material.
  - a) Sketch what happens to the domain magnetization and domain wall in the two cases described below for  $H > 0$  but less than saturation, i.e.
    - i) applied field parallel to the easy axis,
    - ii) applied field perpendicular to the easy axis
  - b) Sketch the  $M$ - $H$  loops in each case.
  - c) Describe how a defect might pin or impede domain wall motion.