Solutions

1.   i)   ii)

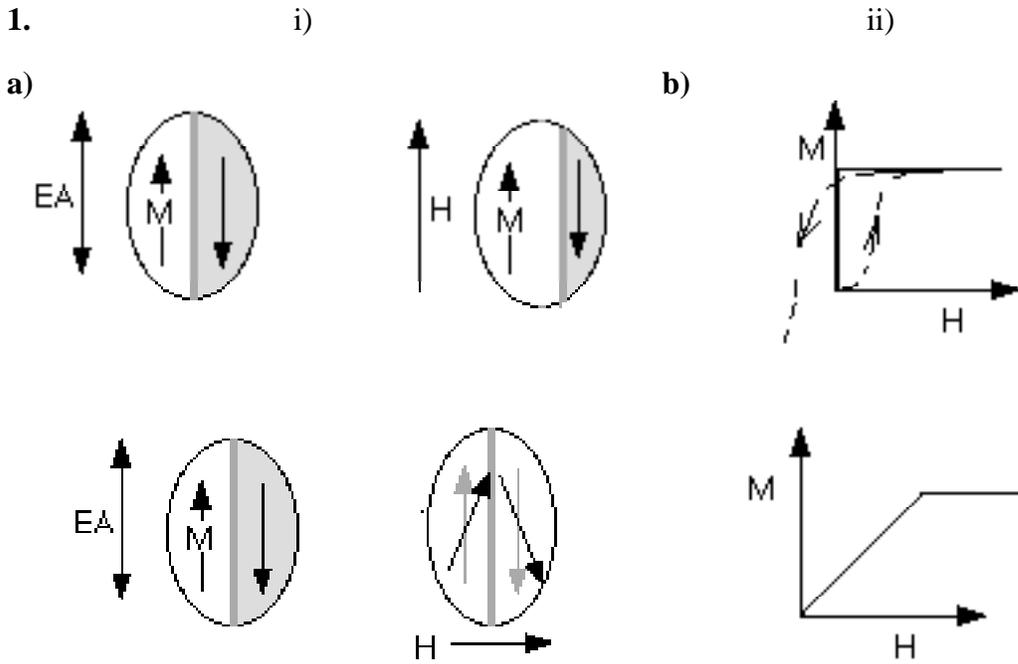**a)**   **b)**

c) See Text, Fig. 9.12. Domain wall energy density is $\sigma_{dw} = 4(AK)^{1/2}$. If this is uniform throughout the material, the wall moves under application of slightest field H. If material is inhomogeneous, wall area or A or K may be a function of position. Non-magnetic defects lower wall energy; magnetic defects can raise or lower all energy. This gives H_c $\neq 0$ and the loop in (a) above, opens up.