

CL49\_Q1. Obtain the expression saturation magnetization, if the magnetic interaction energy is much greater than the thermal energy.

CL49\_Q2. What does Brillouin function represent?

CL49\_Q3. Discuss the Brillouin function for magnetic materials for large values of  $j$  and when  $j=1/2$ . How does this lead to the expression for the paramagnetic susceptibility?

CL49\_Q4. How does magnetic susceptibility vary with temperature in case of paramagnetic materials?