

CL5\_Q1. How does classical theory fail to explain the results of Compton's experiment?

CL5\_Q2. What are the angles at which the Compton shift is minimum and maximum? What are the conclusions drawn from these angles?

CL5\_Q3. Calculate the energy that a photon must possess if it has to have a momentum equal to that of a 10MeV proton. In Compton Effect did you understand why the original peak at  $\lambda$  remained in the spectrum of the scattered radiation?

CL5\_Q4. What is Compton shift? According to classical theory, the scattered X rays have the same frequency as the incident wave. Explain.