③ الفرقة الرابعة - فيزياء - رنين مغناطيسي
١٠/١٤/٢٠٢٠

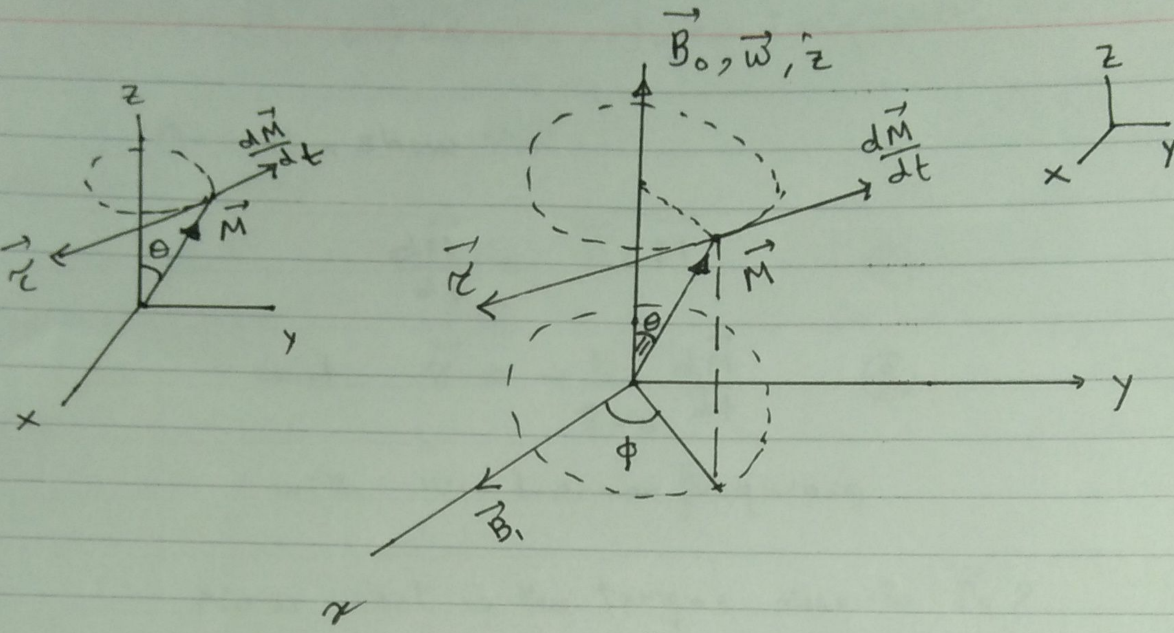

Fig. 2

<u>Let us explain fig. 2</u> :

⇒ $\vec{M}$ vector represents the magnetization, i.e magnetic moment per unit volume. $\vec{M}$ vector precesses around the $\hat{z}$ direction, which is also the direction of $\vec{B}_0$ (constant magnetic field). The frequency of precession is the Larmor frequency (equation 7).

⇒ $\vec{B}_1$ and $\vec{M}$ rotate around the z-axis with the Larmor frequency.

⇒ The torque $\vec{\tau}$ (due to $\vec{B}_0$) is opposite to $\frac{d\vec{M}}{dt}$