

ELECTROMAGNETIC INDUCTION

01. Average induced emf = $\frac{\Delta \Phi}{\Delta t} = \frac{[\dots]}{t_2 - t_1}$

Instantaneous induced emf $\mathcal{E} = - \frac{d\Phi}{dt}$

(311. Minima] emf = v (el meticpna I emf e - $\mathbf{f} = 117r \times 11)31 = (c$

OIL SE . 1:4 $\frac{-41}{45} \rightarrow$ electric [Induce:0 field. $\mathbf{B}$ hdlagnetic

$\mu_0 = 4\pi \times 10^{-7} \text{ Tm/A}$ L μ_0 sekr inductance of the coil

{7. Induced Eng = $-L \frac{dI}{dt}$ $\phi = \mu_0 \mu_r n^2 A l I$ Where cdefficient iyf se]f-irlductance

191 2₂ = $\frac{1}{2} L I^2$, and $\mathcal{E} = -L \frac{dI}{dt}$ Where hi is CD efficient laf mutual inductance

1:10]. The end inductd In clynarn0 e $\mathcal{E} = B A v (\sin \theta)$

{11}. Mkrtual inductance M =