GIVEN: 3-ϕ 4 POLE 80 TURNS IN EACH SLOT

Δ $\phi_{POLE} = 0.06$ Wb $n = 3600$ RPM

FIND: A) f_e OF VOLT

B) V_ϕ & V_{TERM} OF STATOR

SOLN: A) $f_e = \frac{nP}{120} = \frac{3600(6)}{120} = \underline{60 \text{ Hz}}$

B) FOR ONE PHASE ...

$$E = \sqrt{2}\,\pi N_c \phi f$$

$$= \sqrt{2}\,\pi (80)(0.06)(60)$$

$$= 1280 \text{ V}$$

SINCE IT IS Δ ... $V_\phi = V_L = \underline{1280 \text{ V}}$