d) 54 slots , 12 pole , 3 phase

$q = 3/2$ slot/per pole/per phase , double layer.   4,5 slots/per pole

A_1	A_2	$-C_1$	$-C_2$	B_1	B_2	$-A_1$		–	–
A_1	A_2	$-C_1$	$-C_2$	B_1	B_2	$-A_1$		–	–
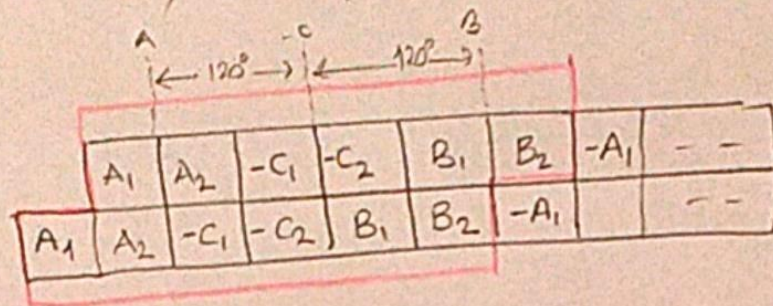
e) Axial length → 270 mm , rated speed → $\dfrac{120f}{P} = n$ rated (rpm)

$$\dfrac{120 \times 60Hz}{12 \text{ pole}} = 600 \text{ rpm (rated speed)}$$

Power out $= T.\omega$.

f) ? time is up :(