

## TENTAMEN I MEKANIK F.K. (TMMI39)

## SVAR

1  $F_{DE} = \frac{F}{3}(\cos \alpha + 2 \sin \alpha)$

2  $\bar{\omega}_1 = -\frac{3v}{4L}\bar{k}$

3  $\alpha = \frac{9P}{16\sqrt{2}mL}$  moturs ,  $A_{horisontell} = \frac{P}{8\sqrt{2}}$  åt höger ,  $A_{vertikal} = mg - \frac{P}{\sqrt{2}}$  uppåt

4  $\bar{\omega} = \omega_2\bar{j} + \omega_1\bar{k}$  ,  $\bar{\alpha} = -\omega_1\omega_2\bar{i} + \dot{\omega}_2\bar{j}$  ,  $\bar{a}_P = R\dot{\omega}_2\bar{i} + (2R\omega_1\omega_2 - L\omega_1^2)\bar{j} - R\omega_2^2\bar{k}$

5  $F_{BC} = \frac{1}{6}mL\omega^2 \sin \beta$