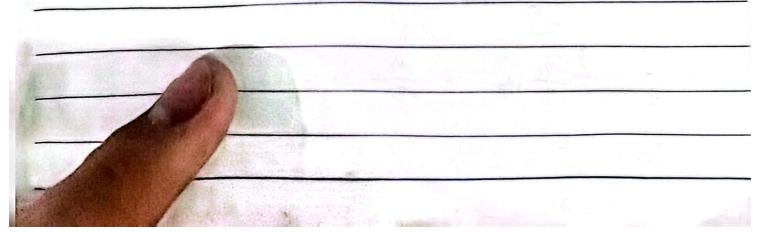
3.11.3.11) KO; = JO, +bO,+KO

(2)
$$\int k_2(x_2-x_1) - kx_1 - b_1x_1 = m_1x_1$$

 $\int k_2(x_1-x_2) - b_2x_2 = m_2x_2$

(3) $\int k_2(x_2-x_1) - k_1x_1 - bx_1 = m_1x_1$ $\int (x_2-x_1) k_2 = m_2 x_2$

3.11.7 $-k_{0}(0_{2}-0_{1}) - k_{2}\theta_{2} = J_{1}\theta_{2}$



3.11.8 A 动能, 生 y x + 土 J, W2 JA= = WI P, W = X1 B 动能. 生型/E++1/B. Wp2 JB== 1 W2 YZ, WB= YE+XI V= - Wi. X. Sind - Wz. /E, L= T-V= = = \frac{\omega_1\cdot \cdot \cdo + Wix, sind + Wilf 3X, = Wi X, + W, X2-X, + W2 x2 (Y; +X,) $=\frac{3w_1}{29}x_1+\frac{w_2}{29^2}$ $(\frac{1}{2}+x_1)$ $\frac{\partial L}{\partial y_E} = \frac{3}{2} \frac{W_2}{q} \cdot \dot{y_E} + \frac{W_2}{2q_2} \dot{x},$ 3+(3)-31, =(3 m) + 1 m2) x, + 2 mg /E - W, sind O

3.11.9 A. 20 AE = VA.M. = = X. m. B: ithre = m2 VB= = m2 (x1 + X2 (0)2)2 + = m, (x, sind)2 T = \frac{1}{2}\hat{X}_1^2 \cdot m_1 + \frac{1}{2}m_2\left(\hat{X}_1 + \hat{X}_2 \cos d) \frac{1}{2} \frac{1}{2}\hat{X}_2^2 \sin \hat{A} \cdot m_2 = = x, -m,+ +m, (x,+ x,2+2X, x, cos d) V= to kx L=T-V= = m, x, + = m2(X, 2 + x, 2 + 2x, x2 cosd) $\frac{\partial L}{\partial x} = m_1 \dot{x}_1 + m_2 \dot{x}_1 + m_2 \dot{x}_2 \cos 2$ 21 = m. x, + m. x, cord d (2) - 21 = m, xi + m2x, + m2 x2 cosa-o=c d (2x2) - 2x = m2 x + px2 + m2 x wx= c

3.11.10. T= = M(R.b)+ + M Wo. R5m0) V= M9R(1-0030) L=T-V= = MR2B2+=MW62.R2.5m20 - Mg R (1-6050) dL = MR2.0, DE = 1 MW2R2.2 Sinte Cos. $\frac{d}{dt}\left(\frac{dL}{d\dot{\theta}}\right) - \frac{\partial L}{\partial \theta} = MR^2 \theta - (MW0^2 R^2 sin \theta cos \theta)$ $MR^{2}\theta + MgR\sin\theta - MW_{o}^{2}R^{2}\sin\theta\cos\theta = 0$ => RB+, 9 sin 0: - Wo2 sin 0 cos0 =0 3.11.11. A (- QCO72, OSin 2) B(bcosd, - bsind) -a cosa+ (ws B, a smd+ (sin B) D(bcosa+lcosB,-bsind+lsings) ①当β改变,以7变 13 -> B+ SB $\frac{\delta W = P.[lsin(\beta+\beta\beta)-lrsin\beta]}{= P.l.\cos\beta\delta}$

SW=-Flsing &B SW=(Pl cos B- Flsin B) SB 回当以改变,是很对. SWp = Pacosd. fd SWF=Fb(-sind). Sd Swipacosa-Fb sind). Sd Plass - Floring =0 $= \frac{1}{\beta} = \arctan\left(\frac{P}{F}\right)$ $= \frac{1}{\beta} = \arctan\left(\frac{Pq}{Fh}\right)$ [DB = 600-LAD 3.11.12 $= (600 - 300) \times 10^{-3}$ d lop = -300 x (+1) _ sin 0 do x 10-) = -300 sind do x 10-3

dw=M do+k(300-(8600-300)) (+dr,) $= M \cdot d\theta + k \left(\frac{300}{\cos \theta} - \frac{200}{\cos \theta} \right) (+dr_r) \times 10^{-3}$ $= M \cdot d\theta + k \frac{300}{\cos \theta} \left(\frac{1}{\cos \theta} - 1 \right) - \frac{200}{\cos^2 \theta} \sin \theta$ $= \cos^2 \theta + \cos^2 \theta$ $= do \left(M + 300 k \frac{1 - \cos \theta}{\cos^2 \theta} \times \frac{-3008 km}{\cos^2 \theta} \right)$ M = 450 (1-ca, 0) tom 0)