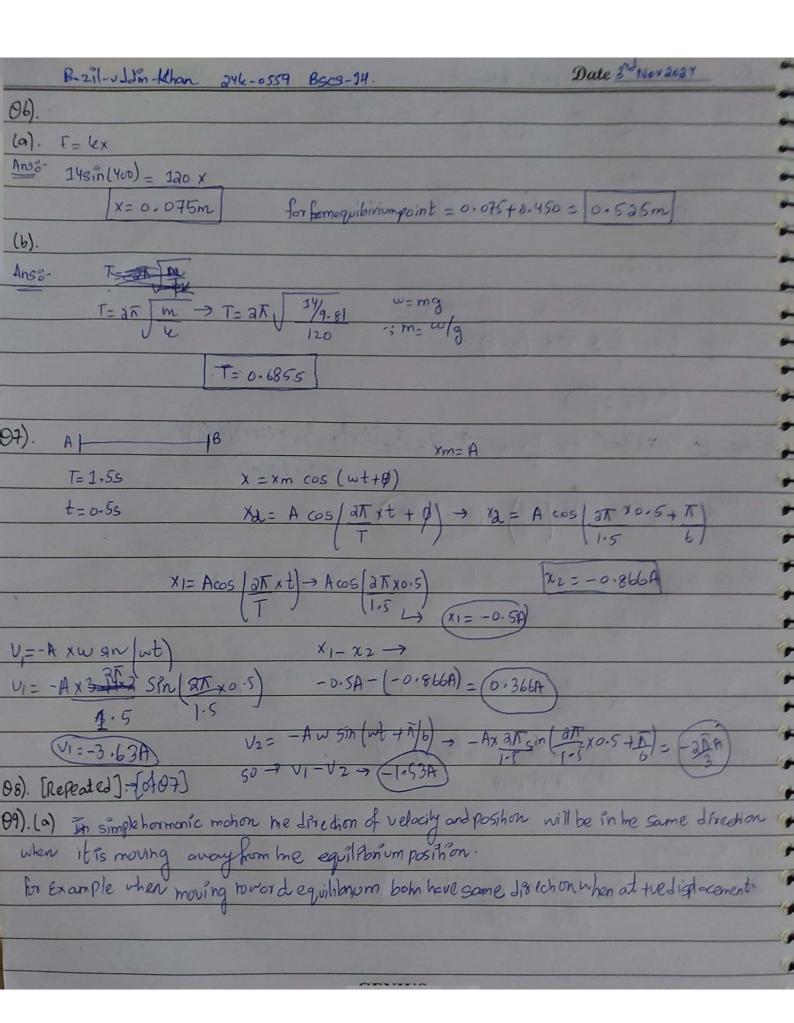


Bozil-udlin-lehan, 244-0559, BBC3-14. Date (b) Ansif f = 1 f(c). Anso V= wxo V=(aT x1.13×0.2) → 1.42m/s (d). Anso $a = (a\pi x | .13)^2 x o . 2 = 10.08 m/s^2$ (e) Anso 7:2= 1 x 150 x (0-2)2 (T. E = 2T) (f) Ans: $V = \frac{1}{2} \times 1 + \frac{1}{2} \times 1 \times 1 = 1 \times 1 =$ (g) Ansia max = (2 TX1, 13) 2x | 0-2 = 3.33 m/52 94). (a). Anso in parallel connected so every le will be equally distributed

f= 1 / 4 3= 1 [4] -> (= 5.2 ×105 N/m so: when leg= 5.2×105 = 1.29×105 N/m (b). Anss- F= 1 5:2x105 = 2.69 H2 95). In senerof= 1 7580/2 = 19.8HZ **GENIUS**



(b). Anso- Directions of Velocity and acceleration cannot be in the same direction.

as hey

(c). Anso- Directions of Lispicconent and acelloration cannot be in some direction due to 9=-w2x may one always in apposite timetion.

 $\frac{1}{1} \frac{(J). \text{ Ansso}}{1 \text{ Lex}^2} = \frac{1}{2} \text{ mv}^2 + \frac{1}{2} \text{ Lex}^2$

If moss get double I soit will not change Total energy as hotal energy remains conserved it will not change.

But keepends on moss of mass get doubles so kee will very as it is dependent on moss.

P. E Jarot depend on mass but it depends on displacement-so it will not getellected if moss changer

1010). X= 5x10-2 cos(at+1/6)

(a) At 1=0 -> X = 5×10-2 cos (2(0)+1/6)= 0.043m

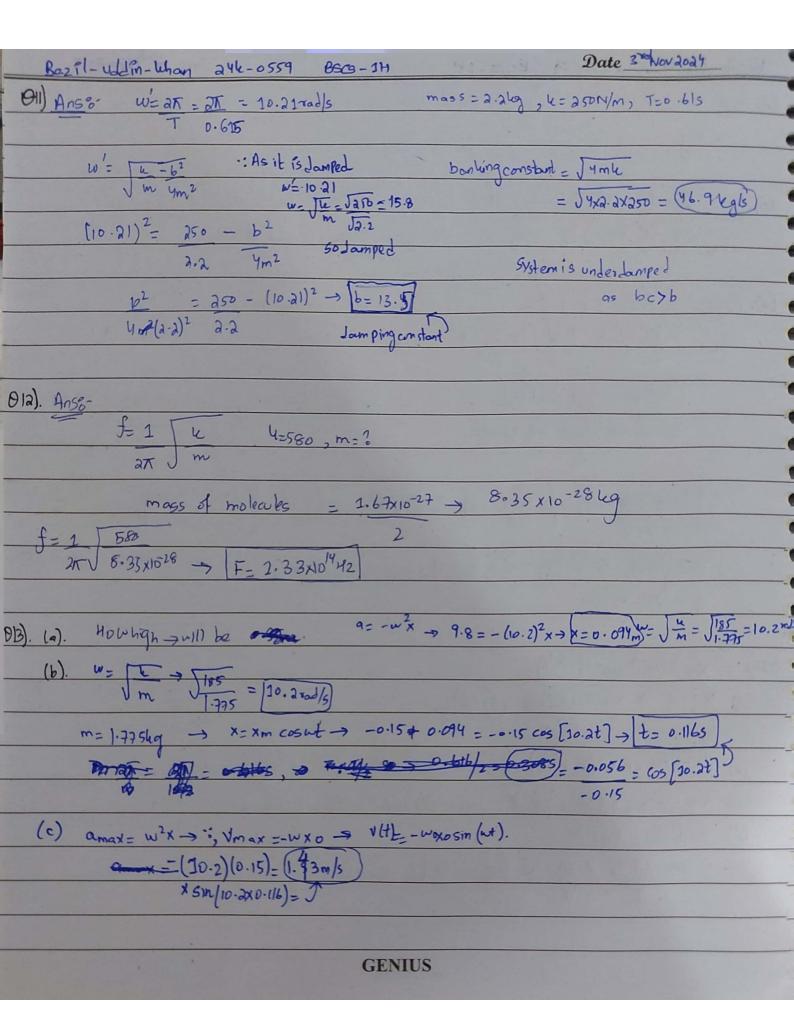
(b). V=-wxm spn (a++1/6) -> V= -5x10-2x 2 sin (a10) + 1/6)-> -0.05m

(c). $q = -\omega^2 \chi_m \cos(at + \pi/6) \rightarrow a = -(a)^2 x 5 x 10^2 \cos(a(0) + \pi/6) \rightarrow -0.17m$

W. Amplible = 5x10-2

w= 21 -> 2= 1 -> [-3.1425]

GENIUS



Date Bozil-uddin-khan 24k-0559 BSCS-14 (t=0) x(0) = -8.6x10-2 a(0) = 48m/s2 48=(8.6x10-2)~2 (w= 23.6 ral/s) w= 21/2 23.6= 21/ (f= 3.75H2) at to (b) V=wxosin(wt+\$) X= X0 cos (wt) -> So Tolinghose V(0) = - WXO sin (0)

X10) X6 cos (0) x605(0) 70.93 = tand (0=24:22°) or (0=0.42 ray) 723.6X -0.086 (c). X10) = xm cos(w+++) -8-6×10=xmcos(0 = 24-22°) xm= 0.0945mor 9.45cm **GENIUS**