	No Date
Getaran Mekaniki	
Tugas 4	[= 4.35 × 10.7
	201× 3016 T
od Diketahui:	
$M = 4.6 \times 10^{-12} \text{ kg}$	[= 2.71 × 10-10.
K = 0.380 N/m	
$C = 4.93 \times 10^{-7} \text{ Ns/m}^{-2}$	cothe pecuality of da
to = 30 m/s	- 11 - nay = 100
x0 = 0 m	
1(31,01×1.	7,c) 2(30)×880,b) / =
a. natural frequency (wn) & critical day	mping (Cc).
$\omega_n = \sqrt{\frac{\kappa}{m}}$	101× 34191'8 / "
	start same was
Parameter State Control of the Contr	8001 301× 16016 =
On = 0,380 Nm 46 ×10-12 kg	
46 ×10-12 (49 . 15) 2011 350	d . He response of the action $K(t) = e^{-t} \omega_n \theta$ (A cas
(1977) 18 W. S. J. (1979)	300 V) 2000 0 2 CANX
$\omega_{n} = \sqrt{8,260869565 \times 10^{10}}$	
·	Ac (=0 , X (6) = 0
On = 9,008 ×105 rad/s.	708 = (0) V ; 0= 30 T
Cc = 21mk. ((0x 66) 1/28 + (0x 66	A CONTRACT - VALVE
Ca : 24 ma. ((0x po)) 19128 + (0x po)	$\frac{\partial}{\partial x} = \frac{\partial}{\partial x} + \frac{\partial}{\partial x} = \frac{\partial}{\partial x} + \frac{\partial}$
CC = 2. (((x)=2/4)(0.200)/-	ms 9 - (0) - m/2 -
Cc - 2 / (4,6×10-12 kg) (0,380 N/m	
(c = 2 1/1 7/9 ×10-12	U = A =
$\frac{Cc -2\sqrt{1.748 \times 10^{-12}}}{Cc = 2.095 \times 10^{-6} \text{ Ns/m}}$	0.00) = - [(0) As-(0)*/
$C_{C} = 2.005 \times 10^{-6} \text{Ns/m}$	5/3/19/12
2,09,000	= 1 +W. B = 30
b. Damping tatlo (L)	00 · 0] =
	hou
2Vmk	
~y mx	
1 = 4,93 × 10-7 Ns/m	
$L_1 = \frac{4.93 \times 10^{-7} \text{ Ns/m}}{2(9.088 \times 10^5) \text{ rad/s}}$	
2(3/000 /3.0)	

	No Date
	Getaran Nevanile
$L = 4.93 \times 10^{-7}$	Tropis 4
1,8176 × 106	
- 12	o) Piketahui:
L = 2.71 × 10-13.	M = 46 × 10-12 Kg
	K = 0,380 Mm
c. the \neq requency of damped $\omega_{n} = \sqrt{\omega_{n}^{2} - \ell^{2}}$	ossillation: 01x EB = 0
$\omega_{n} = \sqrt{\omega_{n}} - 2^{-1}$	5)m 08 = 60
[1020,00512, 102512	W 0 = 0%.
$= \sqrt{(9.088 \times 10^{5})^{2} - (2.71 \times 10^{-13})^{2}}$	
- √8,26744 ×10"	N. INHUTE ACQUIONON (CON) & CAN
18,20/44 >10	2 - L
= 9,091 × 105 rad/s	200 1
	ODN =, 0,3301 My
d. the response of the accelerom $\times (t) = e^{-2\omega_n t}$ (A cos (Wat)	eler. EN TOPROBLE
x(t) = e-200nt (Acos (a)dt)	+ Ban (wat).
<u> </u>	0,01x5090909091= My0
At $t=0$, $\times (0) = 0$	
At $t=0$, $V(0) = 30 \text{m/s}$	50 N = 3,008 ×105 121/5.
- 1 (Aux D	
$\times (0) < e^{-L\omega_{N}\times 0} (A\cos(\omega_{d}\times 0))$	+ Bsin (wd x0)) =0 /2 = 5
$= A\cos(0) + B\sin(0) = 0$	(5) (5) (6) (6) (6) (6) (6) (6)
= A = 0	
14/2) \$22 (1) - XD	C2 1 1 143 × 10 1.
V(0) = - Ian Ae-Swnxosin(wd	
-0.0016	. Co = 2,095 × (0,0 Ns/m
= 0 + Wd B = 30	
= B = 30	(भ्) अपूर्ण रुपानीम्बर्ध प्र
ωd	, O . A
	2V MILL
	The state of the s
	T = 4.40 × 10 T Night
	5/2015 899'E) =

	Allega to the state of the same of the sam
W	No
,613.1	Date
	• . • . • . • . • . • . • . • . • . • .
Direct D.	
Pind B =	
B = 30	
9,091 × 10 5 B = 3,301 × 10 -5 m/s.	
b 2 201 10-5 m/s	
D = 3,30 × 10 11/3.	· · · · · · · · · · · · · · · · · · ·
- SOUNT (D. C.) (C. C.)	6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
So, \times (t) = $e^{-\xi \omega_{nt}}$ (0 cos (ω_{dt}) + (3,301 \times 10	3) an (wat)).
a Value displayent at to I Ms.	
e. Value disparement at t=1 Ms.	
-FWM(IMS)	
\times (IUS) = $e^{-\omega_n(1US)}$ (0 cos(ω_d (IUS)) + (3)	301×103/sin(0)d(145/)
	i
	:
	<u> </u>