



## **ASSIGNMENT # 06**

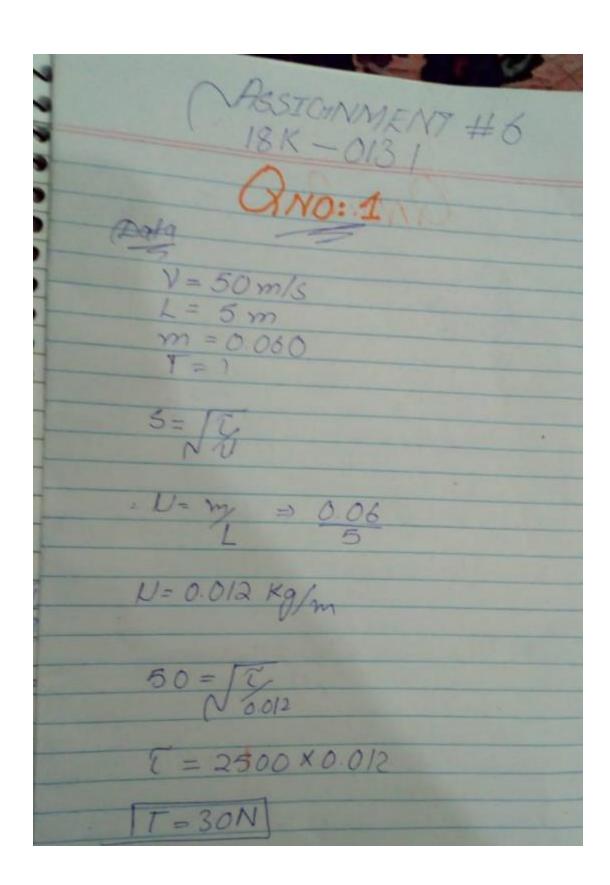
PRESENTED BY:

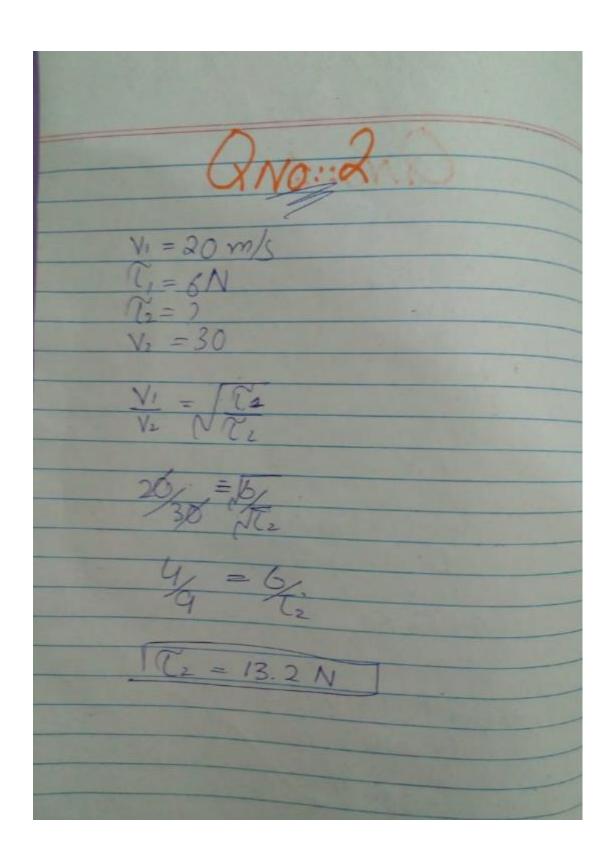
MUHAMMAD USMAN ROLL NO. 18K-0131

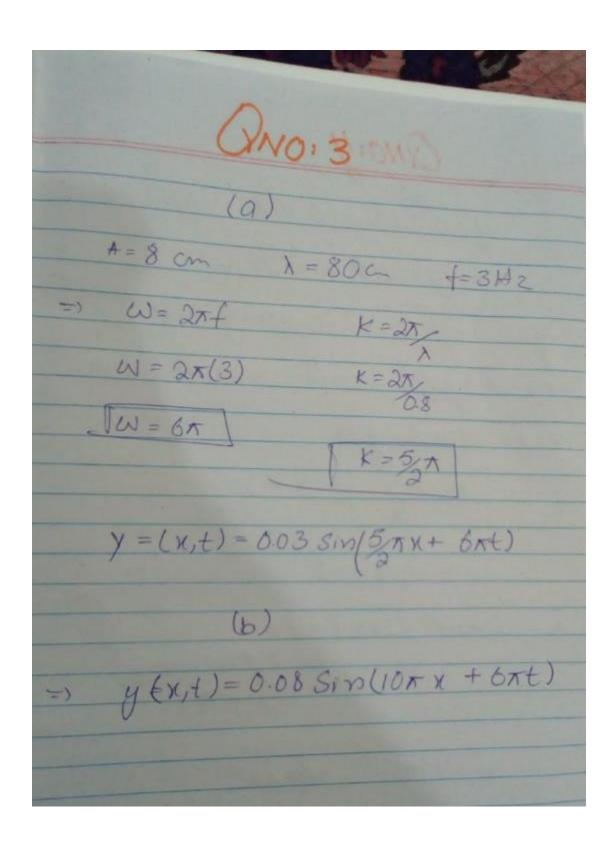
STUDENT OF COMPUTER SCIENCE

**COURSE NAME: APPLIED PHYSICS** 

**COURSE INSTRUCTOR: MADAM RABIA** 

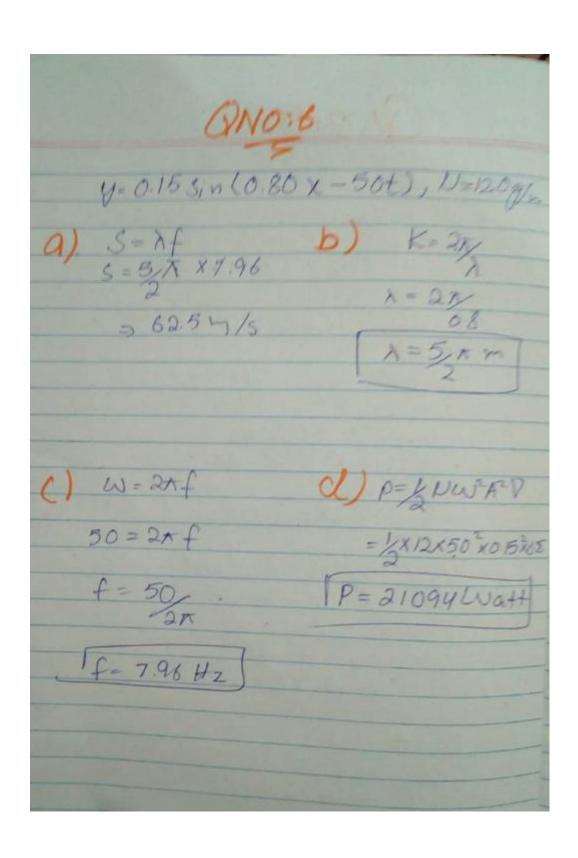






QNO.4
CHOIG STATE
HAS "
y = 0.25 Sin (0.30x - 404)
a) amplitude = 025 m
b) angular frequency = 40
es anculas literia
c) angular Wave number = 0.30
d) varelingth
The state of the s
K-21 - x-21/3
x 0.3
[x = 20.4m]
e) Worse speed = f 3 = 5.4 x20 9
es para operal = f3
= 6.4 × 20 g
>> 133 3m/g
() positive x-axis
WILLS.

y = 0.51cm Sin (Kx - wt)
$K = 3.10 \text{ kack/cm}$ $W = 9.30 \text{ kack/s}$ $t = 1$ $Y = 0.51 \text{ sin} (3.1 - 9.3(10))$ $Y = -0.48 \text{ cm} (+ve \times direction)$ $Y = 2 \text{ cm/Sin} (V)$
Jim CKX-WE
K = 2.11  rad/m, $W = 3.6  had/samplitude = 0.02  m$
amplitude = 0.02 m Wavelength => $k = 2\pi$ $\lambda = 2.98 \text{ m}$
frequency -> W=2xf 3.62=2xf
$f = \frac{3.62}{2\Lambda}$ $f = 0.57Hz$
$Speed = \lambda f$ =>2.98 x 0.57 [V => 1.72 m/s]



	THE REAL PROPERTY.
Q#7	
L=30 m	N COLOR
U=9x10-5Kg/m T=20N	
F(=) (1=)	f3=7 f4
2. V-12	
NN	+3 = 3.f1 = 3 (0.785)
V= 120 N 9x10-3	H3= 2.35 H2
	C. 11
V= 47.14 m/s	fu=ufi
$f_1 = V_1$	fu=4x0.78
21	fu=3.14Hz
f1 = 47.14	
2×30	1
[f1=0.78HZ]	
f2 = 2f1	
f2 = 2(0.785)	
Ifz=1.57HZ	

QN0:8 L=120 cm L=1.28m fu= 120 Hz a) x=? b)f1=1 n=4 = fu= 4f1 => f1=120/ [f1=30Hz] · 1 = 2 4 1x=0.6m

$f_{1}=220 H2 D B B B B B B B B B B B B B B B B B B $	
$V^{2} = \sqrt{50}$ $V^{2} = \sqrt{10}$ $V^{2} = \sqrt{10} = T = 308 \times 308 (17 \times 10^{-3})$ $T = 161.2 \text{ N}$	