## Assignment-6

Mole: - There will be one surposize question . 1. Find the steady state current i flowing through circuit when @ f= 60Hz and @ f= 400Hz, where Us = 160 cos wit V. \$ 300r Us t Zuf ZloomH Fig: 1\_\_\_\_\_ 2. For the circuit shown in fig 2, dete simine phasor currents Is, Il, I and IR if w= 1000 read/sec. )  $I = \frac{3}{80mH} = \frac{1}{2}R = 250r$   $I = \frac{1}{8}R = \frac{3}{80mH} = \frac{1}{2}R = 250r$   $I = \frac{1}{8}R = \frac{1}{8}R$ 10020 Fig:2.

3. Find the two node voltages Va(t) and lept) for the circuit shown in fig 3 when Ug(+1) = 1.2 cos 4000t. la room lo room 25mH 20mH 2002 - Suf Hig 3. \_\_\_\_\_ 4. For the circuit shown in fig 4, Calculate value of Volt) using MATLAB RI (f)  $R_2 = CT U_0(t)$ Us(+) = Acos(wt+0)  $R_1 = GS2$ where, w=2 L = 4HA=12  $\Theta = 30^{\circ}$ R2=122 C= 1/24 F