Name: Ahmed wael Mohemed ID: 6071 Group, 2 Section: 2 Question (2) Part (1) m(t) = 5:nc2(10-3t) r(t) = m(t) Gs(21110st)  $m(t) \Rightarrow M(\omega) = \int m(t) e^{-j\omega t} dt$ From table  $\frac{W}{2\pi} \operatorname{Sinc}^{2}(\frac{Wt}{2}) \implies \Delta(\frac{\omega}{2W})$  $\frac{1}{2} = 10^{-3} \qquad \frac{1}{2} = 10^{-3} \qquad \frac{1}{2} = 10^{-3} \qquad \frac{1}{4} = \frac{2\pi}{10^{-3}} = \frac{1}{4} = \frac{1}{10^{-3}} = \frac{1}{10^{-3$  $\frac{2 \times 10^{-3}}{2 \text{ T}} \text{ M(w)} = \text{D}\left(\frac{\text{w}}{2 \text{ W}}\right) \left(\text{R(w)} = \text{M(w)} + \text{Cos } 2 \text{ Ti } 10^{5} \text{ F}\right)$ (mct) Cos(wol-)= } [M(w-wo)+Minswill Property of Pourier transform in Case of Preguency Shift (Rw=5001 [A (250 (W-2111 x 105))+ A (250 (W+2x11 x 105))) R(w) is the result of the Frequency shift by M(w) phone (M(w)) mag = [H(w)] may -1 (Pw) = phase (P(w))