

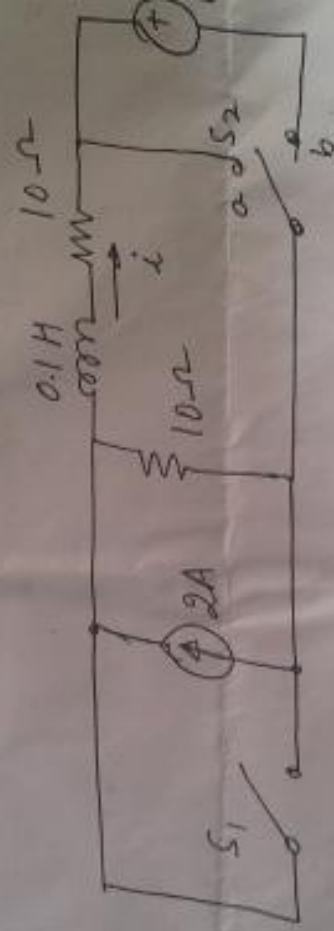
Ques 4



a) Obtain V_m (4)

b) Implement this operation using op amp.

Ques 5



Assume $i = I_0$ at time $t = 0$.

At $t = 0$ switch S_1 is opened & switch S_2 is moved from 'a' to 'b'

a) Obtain $i(t)$

b) Plot $i(t)$ (5)

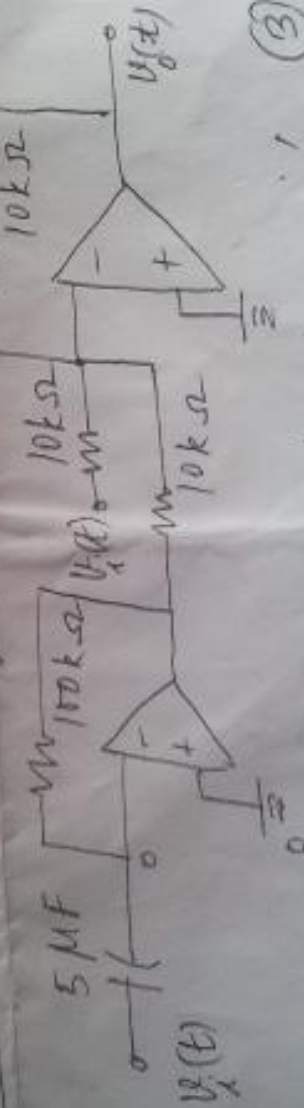
1st Sem 2013-14

Q1 Find the Thevenin's Equivalent for the circuit shown in the following fig.



$\frac{v}{2} = \frac{av}{2}$
 $\frac{v}{2} = \frac{av}{2} + bV$
 $\frac{v}{2} = \frac{av}{2} + bV$ (4)

Q2 Find $v_o(t)$, given that $v_i(t) = 5 \sin 10t \text{ mV}$



Q3 Find AC steady state Thevenin's equivalent of the following ckt. ($\omega = 377$)

