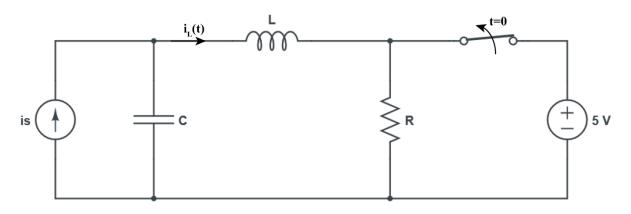
Upload your answer as a single PDF file at max. 5MB of size.

For the given circuit switch is opened at t=0 after being closed for a long time. R=40 Ohm, C=25mF, L=10H



1) If
$$i_s(t) = 10 u(t)A$$

a.
$$i_L(0^-) = ?$$

b.
$$i_L(t) = ?$$

2) If
$$i_s(t) = e^{-3t} u(t)A$$

a.
$$i_L(\infty) = ?$$

b. $i_L(t) = ?$

b.
$$i_{L}(t) = i_{L}(t)$$