

QUESTION 2 For the network in Fig 2, which has the same graph as in Q1(i) writing relevant $v_b(t)$ and $i_b(t)$ relationships develop node analysis equations and mesh analysis equations as a set of coupled differential equations.

QUESTION 3 For the network in Fig 2 write down the current through the capacitor and voltage across the inductor as linear functions of current through the inductor and voltage across the capacitor. Show that we can express the current through the resistor as a linear function of inductor current and capacitor voltage.