Taibah University

College of Engineering

Electrical Engineering Department



جامعة طيبة

كلية المندسة

قسم المندسة الكمربائية

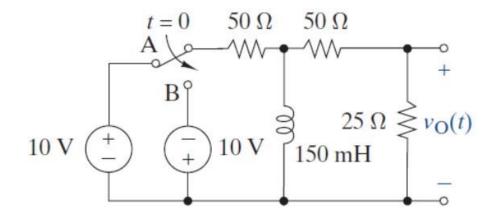
EE 201 Electric Circuits 1

Final Exam

19 April 2021

Problem # 4:

The switch in the figure below has been in position \mathbf{A} for a long time. At t = 0, the switch moves to \mathbf{B} .



- a) What is the initial current across the inductor?
- b) For t > 0, the switch is moved to B, what is the time constant, (τ) ?
- c) Find the current through the inductor for $t \ge 0$.
- d) Find the voltage across the 25Ω , $V_0(t)$, for $t \ge 0$.