ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

Mid-Semester Examination   Summer Semester, A.Y. 2019-2020
Course No.: EEE 4201   Time: 30 Minutes
Course Title: Electrical Circuit II   Full Marks: 25

Marks in the margin indicate full marks. It is an open book exam. Students are not allowed to use any keyboard and mobile during the examination time. Assume suitable values for any missing data.

All questions must be answered

3. a) For the coupled coils in Fig. 3(a), solve for I_1 and I_2 using T-equivalent model.   10
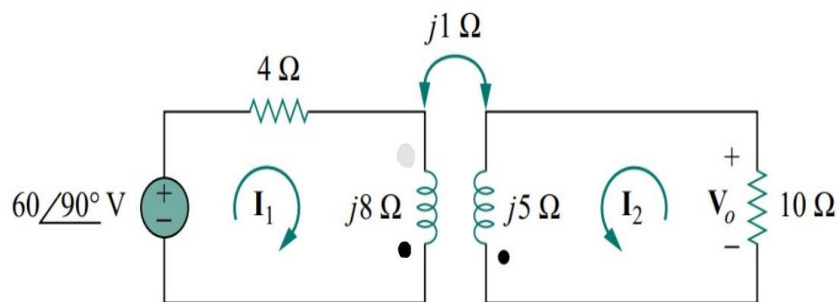

Fig. 3(a)

b) For the Circuit in Fig. 3(b), find i) $v(0^+)$ and $i(0^+)$, ii) $\frac{dv(0^+)}{dt}$ and $\frac{di(0^+)}{dt}$,   and iii) $v(\alpha)$ and $i(\alpha)$.   15
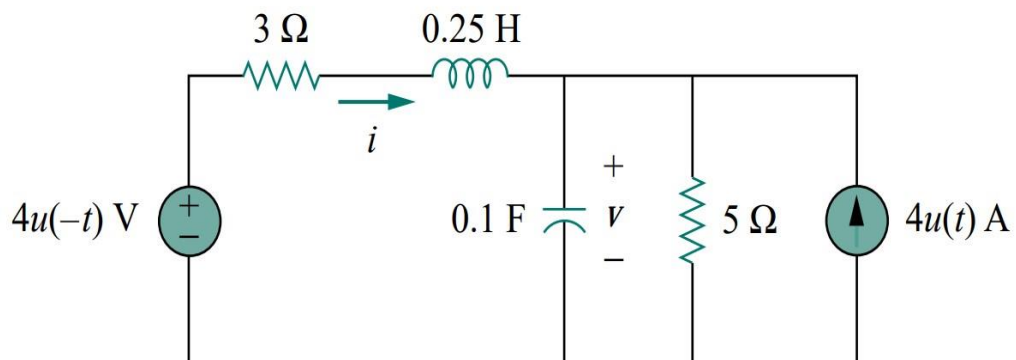

Fig. 3(b)