September 29, 2020

EAST WEST UNIVERSITY
Department of Computer Science and Engineering
B.Sc. in Computer Science and Engineering Program
Final Examination, Summer 2020 Semester

Course:	**CSE 209 Electrical Circuits, Section-2**
Instructor:	**M Saddam Hossain Khan, Senior Lecturer, CSE Department**
Full Marks:	**15 (15 will be counted for final grading)**
Time:	**1 Hour and 30 Minutes (Including submission)**

Note: There are FIVE questions, answer ALL of them. Course Outcome (CO), Cognitive Level and Mark of each question are mentioned at the right margin.

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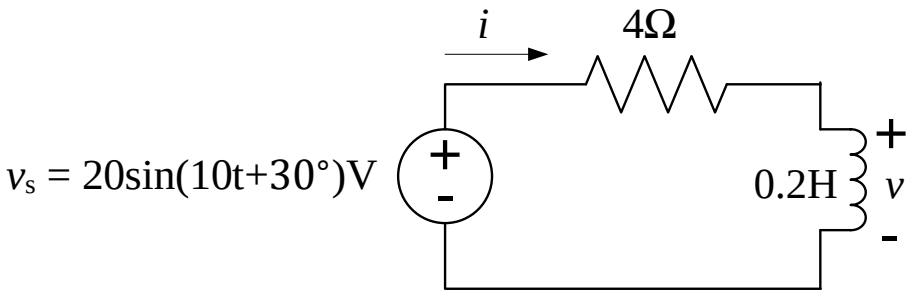
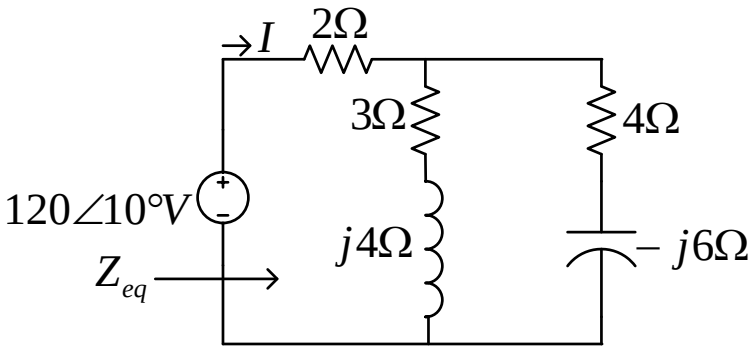
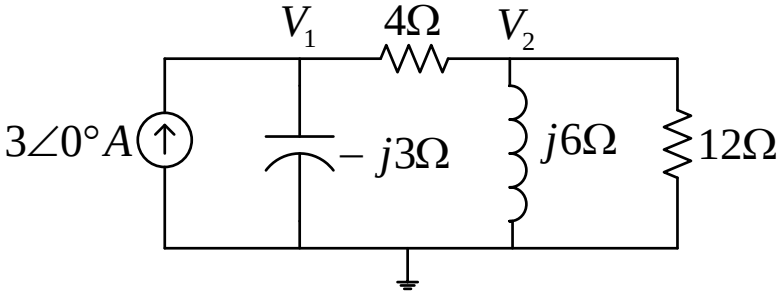
1. **Determine** $v(t)$ and $i(t)$ in the following circuit. [CO1,C2, Mark:2]



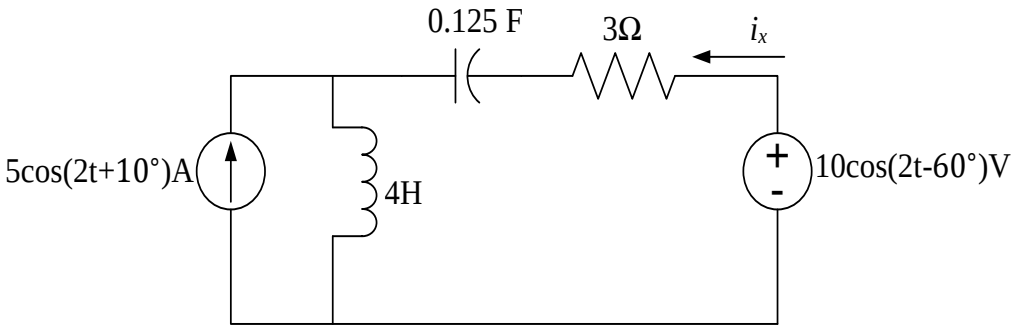
2. **Determine** Z_{eq} and I for the following circuit. [CO1,C2, Mark: 3]



3. Using nodal analysis, **compute** V_1 for the following circuit. [CO3,C4, Mark: 3]



4. Using the superposition principle, **find** i_x in the following circuit. [CO3,C4, Mark:3]



5. **Find** the value of $\boldsymbol{Z}_L$ that will absorb the maximum power and the value of the maximum power in the following circuit. [CO3,C4, Mark:4]