JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY
Electronics and Communication Engineering
Electrical Science-1 (15B11EC111)
Tutorial Sheet: 9

Q1. [CO2] Find the Thevenin's equivalent circuit as seen from terminals a and b for the circuit shown in Fig. 1.

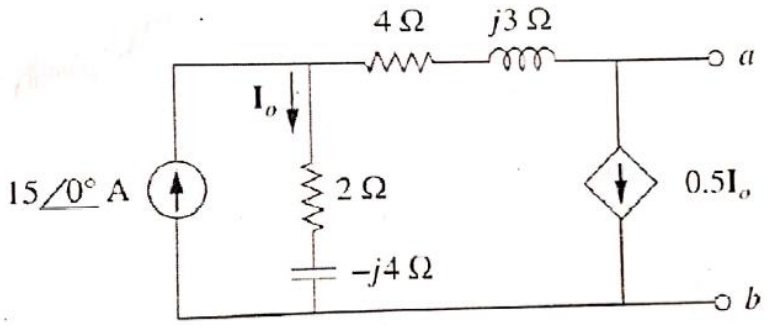

Fig. 1

Q2. [CO2] Obtain current Io in the circuit of Fig. 2 using Norton's theorem.

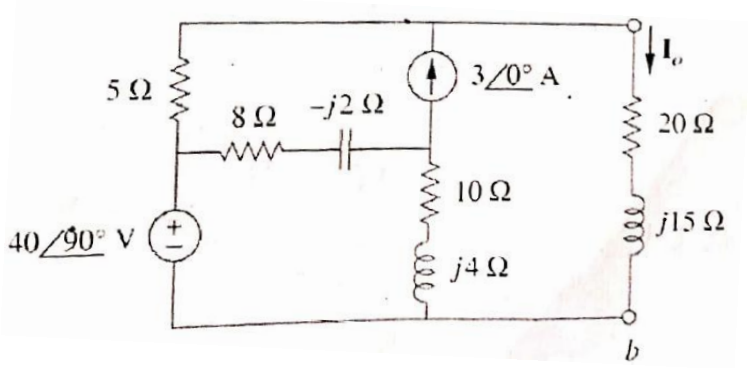

Fig. 2

Q3. [CO2] Calculate the power factor seen by the source and the average power supplied by the source in the circuit of Fig. 3.

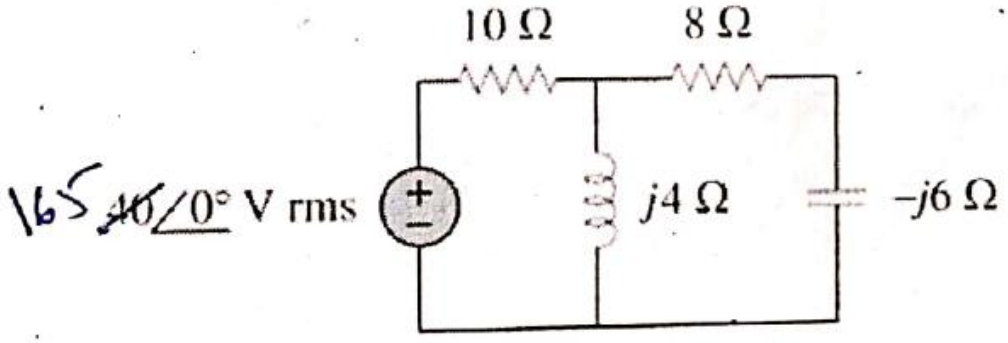

Fig. 3

Q4. [CO2] Find the value of the load impedance in the circuit of Fig. 4, for which it would absorbs the maximum average power .

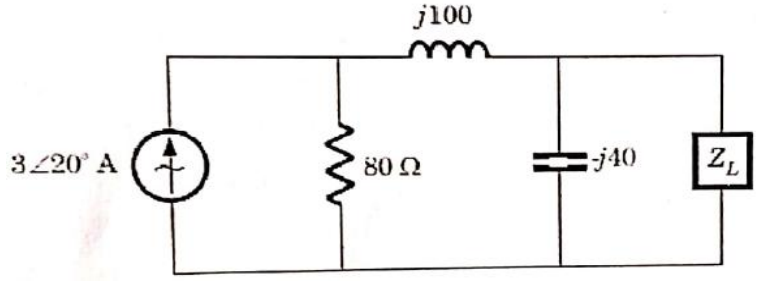

Fig. 4

Q5. [CO2] In the circuit of Fig. 5, find the maximum power absorbed by Z_L.

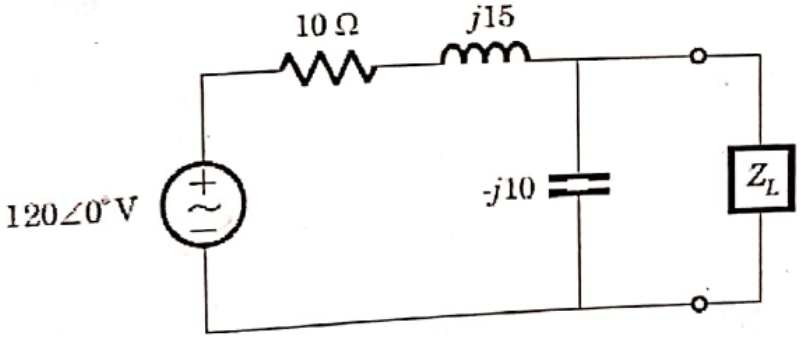

Fig. 5