Ooo
Mark: 5/10 (total score: 5/10)

+3/1/52+

Example Exam - Basic Electricity, 08/10/2018

Name: .....

Student ID:

In the following circuit, where source voltage is $V_s = 127$ V, current and active power measurements were taken:

- $I_2 = 1$ A;
- $I_3 = 3$ A;
- $P_3 = 280$ W (measured in RL branch)

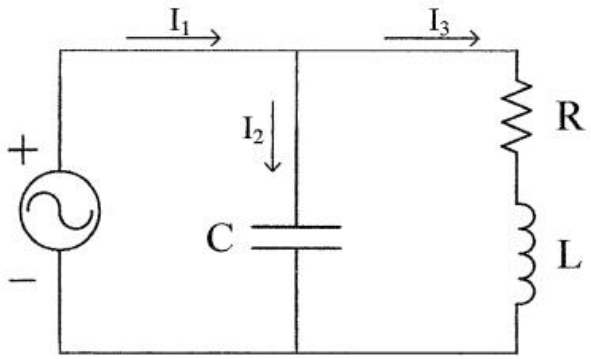
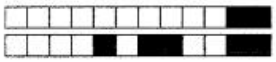
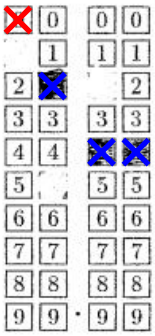


Figura 3: Circuit

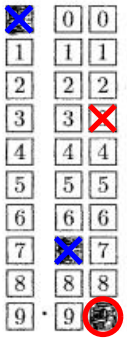


Question 1 Find the magnitude for current I_1, in amperes.



2/2

Question 2 Find the power factor in the RL branch (leading or lagging).



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Question 3 Find the power factor as seen from the voltage source (leading or lagging).

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+3/3/50+

Question 4 Describe the procedure and assumptions that should be followed to find the capacitor that adjusts the power factor to a specific value.

0 0.5 1 1.5 2 2.5 [redacted]

3/3