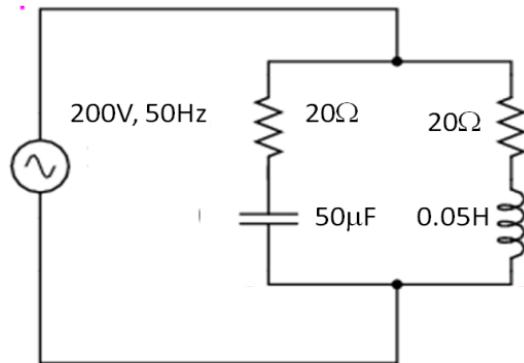


23Z102 Basics of Electrical and Electronics Systems
Tutorial Test 2

Date: 25.10.2023

1. For the following circuit, draw the phasor diagram and calculate the (i) line current, (ii) power factor and (iii) power consumption



2. A resistance R , an inductance $L = 0.01 \text{ H}$ and a capacitance C are connected in series. When an alternating voltage $v = 100 \sin(1000t - 20^\circ)$ is applied to the series combination, the current flowing is $10\sqrt{2} \sin(1000t - 65^\circ)$. Find the values of R and C .