

King Fahd University of Petroleum & Minerals
Department of Electrical Engineering

Quiz #3

EE460 Power Electronics

November 2007

Name: _____ ID: _____ Grade: _____

A single phase full converter in Fig. 1 is supplied from 120-V 60-Hz supply and the load resistance is $R=10\Omega$. If the average output voltage is 25% of the maximum possible average output voltage, calculate:

- (a) The delay angle α .
- (b) The average and rms thyristor currents.
- (c) The average and rms output currents.
- (d) The input power factor, PF.
- (e) Draw the voltage across the Th3.

