

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
ELECTRICAL ENGINEERING DEPARTMENT

EE380 [091]

SEC# _____

Quiz #10

Name: _____ ID: _____ Grade: _____

DO NOT USE CALCULATOR

The open loop transfer function is given by

$$G(s)H(s) = \frac{K}{s(s+2)(s+10)}$$

1) Determine the value of K such that the system may have a gain margin of 6 dB

2) Determine the value of K such that the system may have a phase margin of 45°