Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (please print)

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ECE 3355 -- Quiz #3

February 25, 2024

Keep this quiz closed until you are told to begin.

1. Print your name, and sign your name, at the top of this page.
2. This quiz is closed book, closed notes. You may use one 8.5” x 11” crib sheet, or its equivalent. You may use a calculator. You should **not** use a cell phone, tablet computer, or laptop computer, as you work on this quiz.
3. Show all work on these pages. You may use both sides of each page. Show all work necessary to complete the problem. A solution without the appropriate work shown will receive no credit. A solution which is not given in a reasonable order will lose credit.
4. Show all units in solutions, intermediate results, and figures. Units in the quiz will be included between square brackets.
5. Do not use red ink. Do not use red pencil.
6. You will have 30 minutes to work on this quiz.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/20

Room for extra work

The transfer function *H(w)* for a circuit is given below. Plot the straight-line approximation to the magnitude Bode plot for *H(w)*. Plot over the range from 0.1[rad/s] to 100[krad/s]. Use the semi-log graph paper given on the next pages. Two sheets are provided, in case you need more than one sheet.



**Solution:**

The transfer function *H(w)* for a circuit is given below. Plot the straight-line approximation to the magnitude Bode plot for *H(w)*. Plot over the range from 0.1[rad/s] to 100[krad/s]. Use the semi-log graph paper given on the next pages. Two sheets are provided, in case you need more than one sheet.







