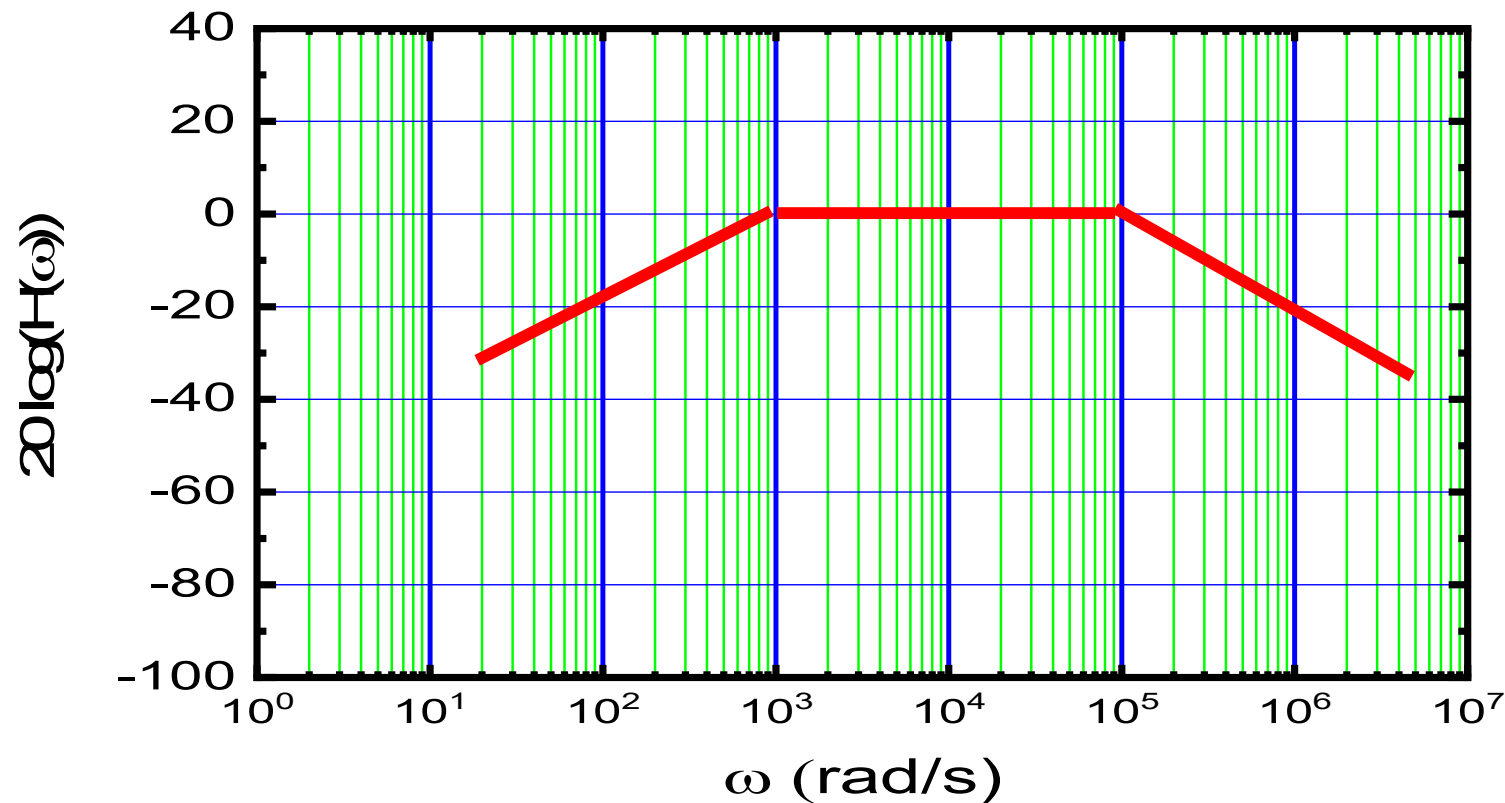


ESC201T : Introduction to Electronics

Mid-Sem Exam -partC (18/10/2020) (Note there are 3-pages)

Time : 7.20-8PM. Stop at 7.50pm and submit within time

Q.6(a) Determine the simplest transfer function expression that will have the asymptotic Bode plot shown below. Give brief reasons for your answer.-----3 marks

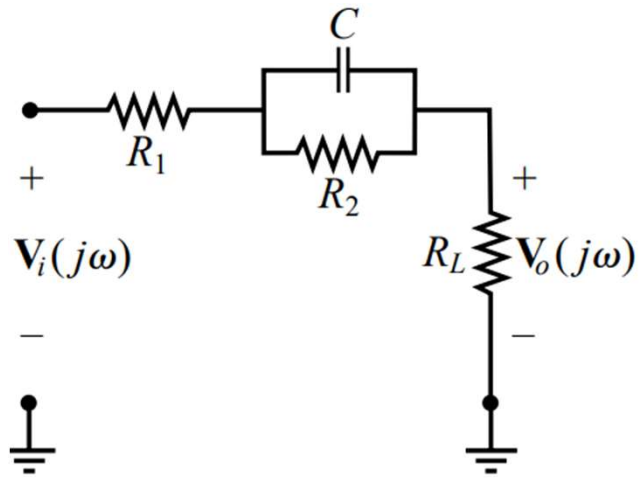


Q.6 (b) Design a circuit to implement the transfer function obtained in part (a) assuming that you have only the following components available

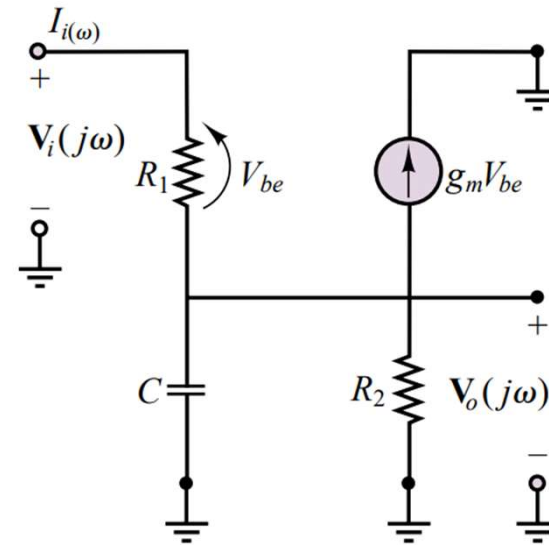
1. Only two resistors , each of value 1K ohms
2. Only Two capacitors. Each one can have any independent value
3. One voltage controlled voltage source of any value (in case you require it)

Give the complete circuit diagram and values of all components. Give brief reasons for your design.-----5 marks

Q. 7 Determine the nature of filter for each one of the two circuits shown below. Give brief justification -----2 Marks



Filter-A



Filter-B