

ESC201T : Introduction to Electronics

MQ3 (8/10/2020)

Q.1 Sketch the Bode plot (magnitude part) of the transfer function given below. Show all relevant details in the diagram. Using only the plot, estimate the magnitude of $H(\omega)$ (in dB) at $\omega = 5000$ and 10^6 rad/s ----10 marks

$$H(\omega) = \frac{1+j\omega/10^3}{1+\frac{j\omega}{10^2}} \times \frac{1}{1+\frac{j\omega}{10^4}}$$

Ps: As a HW problem, (not for submission or grading), try to sketch the phase plot