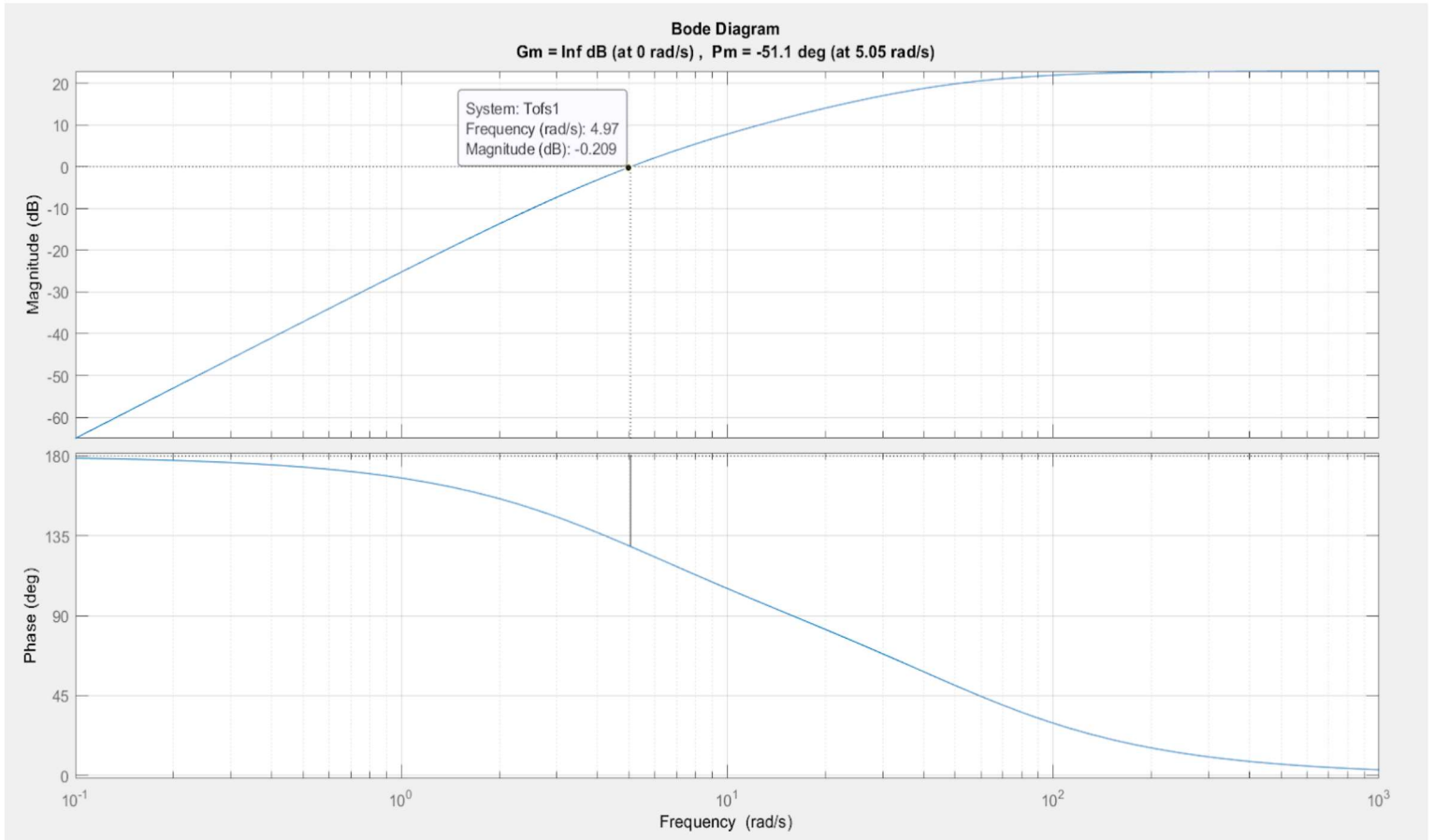


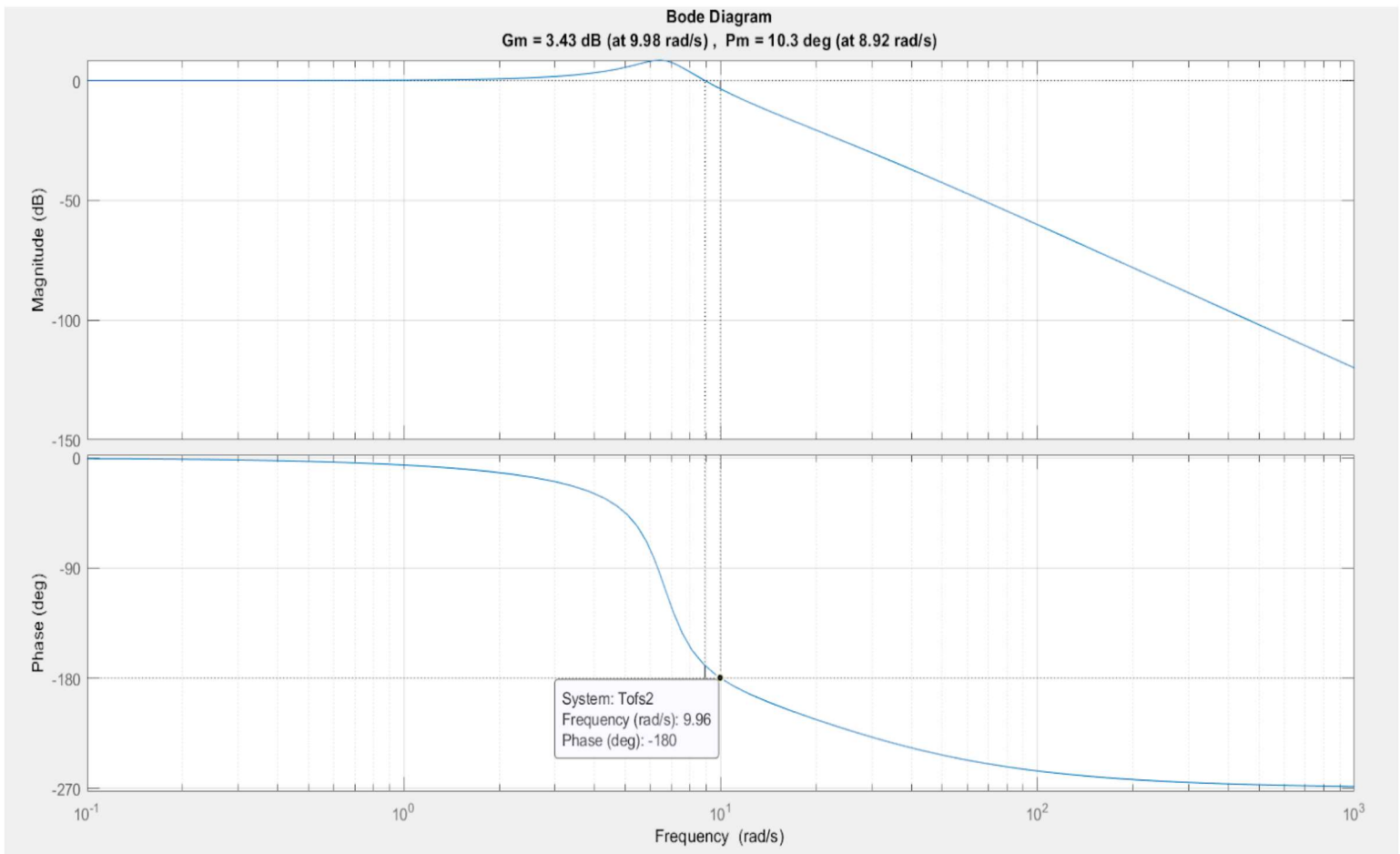
Bode Plots :

System Q.7



From the above Bode plot, we observe that for $K = 0.056$, Gain Crossover Frequency is $\omega_p = 5 \text{ rad/sec}$, as required.

System Q.8



From the above Bode Plot , it is clear that the Phase Crossover Frequency is 9.96 rad/sec.