

Question 1

- a) What is an active filter ? What are its types ?
- b) Derive the magnitude and the phase of the system gain of the low pass active filter with a pass-band gain $A_{pb} = 10 \text{ dB}$, $R_F = 10\text{k}\Omega$ and $R_s = 1.1\text{k}\Omega$.
- c) Plot the magnitude and phase frequency response curve for the low-pass active filter of Question 1b).