

## EE254 - Op Amp Characteristics Lab Report Format

1. Front page
2. Lab sheet
3. Part (a)
  - a. Observations for steps 1 & 2
  - b. Calculations for steps 1 & 2
4. Part (b)
  - a. Observations
  - b. Calculations
5. Part (c)
  - a. Observations
    - i. Table 01: Input amplitude, Output amplitude, phase shift variation with input signal frequency
    - ii. A specimen calculation for gain response and phase response
  - b. Tabulation
    - i. The graph and the table (Table 02) for the **variation of voltage gain with frequency**  
(Note: for the graph, the x-axis should be in dB/Hz, the y-axis is voltage gain.)
    - ii. The graph and the table (Table 03) for the **variation of phase response with frequency**  
(Note: for the graph, the x-axis should be in dB/Hz, the y-axis is phase response in degrees.)
6. Part (d)
  - a. Observations
  - b. Calculations
7. Part (e)
  - a. Observations
    - i. Observation for the 3<sup>rd</sup> question
    - ii. Table 04: Rising time, falling time, and amplitude of the output waveform for different frequencies
    - iii. A specimen calculation for the temporal rate of change of the output voltage for both rising and falling edge cases (units should be in V/ $\mu$ s)
  - b. Tabulation
    - i. Table 05: Variation of the temporal rate of change of the closed-loop amplifier output voltage for rising and falling edges with frequencies
  - c. Results
    - i. Calculate results for 5 (d).

8. Discussion
9. References