

ECT-211 (Applied Electronics)

Home Assignment – 1

Max Marks: 10

Instructions:

- Please **DO NOT** copy content from elsewhere/friends/internet.
- Please use **A4** sized papers (commonly used for photocopying) to write your answers.
- Write only on **ONE** side of the papers.
- Please **DO NOT** enclose your assignment in fancy/costly plastic file covers. Just a single staple at the upper left corner of your assignment should suffice.
- Last day/date/time for submission is **Monday/23 February 2015/5 PM**.

1. Tabulate the various parameters used to characterize operational amplifiers. Present a comparison between the ideal and practical values.
2. Almost all the circuits discussed in the classroom assumed that the operational amplifier had infinite open-loop gain and infinite bandwidth (both ideal cases).

Discuss the effect of ‘finite open-loop gain’ and ‘limited bandwidth’ on the performance of (practical) operational amplifier based circuits.

3. Using the parameters listed in the table you compile in answer to Q-1 above, find out the best performance operational amplifier commercially available today, and give a brief write-up about its characteristics.