DELHI TECHNOLOGICAL UNIVERSITY

Analog Electronics – II

Project Proposal

Submitted by :

Anshul **(2K19/EC/022)**

Abhay Lakhotra **(2K19/EC/006)**

Submitted to :

Prof. Rajeshwari Pandey

Topic : Cascode Amplifier using BJT (Hardware + Simulation)

Abstract :

A Cascode amplifier consists of a CE amplifier followed by a CB amplifier. The CE amplifier is directly coupled to the CB amplifier. Hence a Cascode amplifier is defined as a direct coupled *CE-CB amplifier*. The CE amplifier drives a CB amplifier for both DC and AC inputs.

The first stage operates as a current amplifier, while the second stage provides a low input-resistance loading and (nearly) unity current gain transfer to the output resistance. This configuration provides a *reduced internal capacitive coupling* between input and output, improving *high frequency performance*. We will use ***LTspice*** to compute the DC bias voltages and currents, and the AC voltage gain.