

## ECE 443 APPLIED ELECTRONICS - LAB 5 RECEIVER DESIGN I (PRE AMPLIFIER)

**G. Sener**

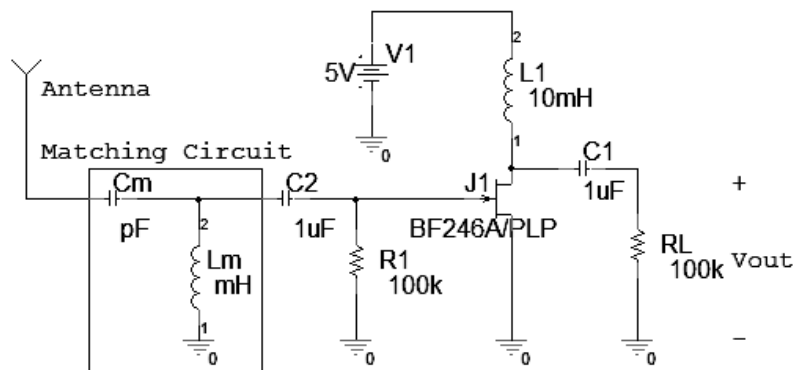
Cankaya University, Electronics and Communication Engineering Department,  
06810, Yenimahalle, Ankara, Turkey.  
email: sener@cankaya.edu.tr

**Abstract**—This lab experiment aims to teach students how to implement the first amplifier stage in receiver circuit.

### 1. METHODS

Parts:  $R = 100k\Omega$ ,  $C=1\mu F$ ,  $L=10mH$ ,  $C_m=50-350pF$ ,  $L_m=10mH$ ,  $J=BF246B$  Jfet transistor

1. Implement the following circuit (Fig.1).
2. Observe the amplitude of the output waveform and draw it in your



**Figure 1.** a)Circuit Diagram

lab notebook.

3. Calculate the output power across a 1kohm resistor.
4. Roughly measure the distance between the receiver and the transmitter.