COURSE TITLE : CIRCUITS LAB
COURSE CODE : 349
COURSE CATEGORY : B
PERIODS/WEEK : 6
PERIODS/SEMESTER : 108
CREDITS : 4

LIST OF EXPERIMENTS

At least 15 experiments of the following type to be completed. Application oriented experiments have been included. These may be explained in detail during the lab hours.

1. Design and construct
   (i) RC differentiator circuit
   (ii) RC integrator circuit and study its pulse response (For 3 sets of RC values)
2. Set up a transistor switch and observe its performance.
3. Set up a single stage RC coupled CE amplifier with potential divider bias
   (i) Plot its frequency response and determine the band width
4. Construct a class B push pull amplifier circuit and observe its input/output waveforms.
5. Set up an RC phase shift oscillator for a given frequency of oscillation.(design frequency determined components only)
6. Set up a Hartley oscillator and observe its output waveforms.
7. Set up a Colpitts oscillator and observe its output waveforms.
8. Design, construct and observe the waveforms of a transistor astable multivibrator for a specified frequency.(design frequency determined components only)
9. Design a BJT monostable multivibrator for a particular delay and plot the wave forms at base and collector of the transistors. .(design frequency determined components only)
10. Set up a Schmitt trigger circuit using BJT for specified UTP and LTP and observe the output with a sine wave input.
11Set up a single stage JFET amplifier and calculate its gain.