

1. EXPERIMENT LIST IN ANAGOG ELECTRONICS LAB -- **2011**

- 7 1. Realization of Phase Locked Loop(PLL)
 - A. Determination of free running frequency.
 - B. Determination of Locked Range Frequency (FLH-FLL)
 - C. Determination of Capture Range Frequency(FCH-FCL)
- 6 2. To study the Voltage Control Oscillator(VCO)
 - A. Design voltage control Oscillator
 - B. Determine the amplitude of Triangular and square wave Oscillator.
 - C. Determine the Square and triangular wave oscillator by varying the different circuit parameter.
- 1 3. Implementation of the equation using two operational Amplifier (IC741)

$$V_o = -5V_1 + 2V_2 - 10V_3$$
 Use minimum value of resistor as 10K.
- 2 4. Design a Differential Amplifier using Transistor
 - A. Determine the biasing condition, Common Mode gain (A c.m),
Different Mode Gain (A d.m.),
 - B. C.M.R.R, Frequency response.
- 4 5. Cascode Amplifier
 - A. To understand the basic principle of operation and to determine the Voltage gain and bandwidth
- 8 6. Digital to Analog Converter (D/A)
 - A. Using R-2R Ladder network
 - B. Input of Ladder network will connect with 4 bit ripple counter output.
 - C. Measure and draw the output DC by CRO
- 9 7. Analog to Digital Converter(A/D)
 - A. Successive approximation type
- 3 8. Design a Wien Bridge Oscillator using OP-Amp and verify its operation
- 5 9. Design RC couple Amplifier using MOSFET (enhancement type)
 - A. Calculate the parameters, B. DC condition, C. Signal Handling capacity, D. Gain E. Frequency response and bandwidth.
- 0 10. Design a Dual mode DC Regulated power supply($\pm 6V$)