M.Sc. second Year LABORATORY course

Paper code PHY555L Total Marks: 200

Name of the Experiment

Unit −1 : POWER SUPPLIES

Unit -2 : ZENER DIODE AS A VOLTAGE REGULATOR

Unit -3 : RC-COUPLED AMPLIFIER

Unit -4 : RC-PHASE SHIFT OSCILLATOR

Unit -5 : COLPITS OSCILLATOR

Unit –6 : OPERATIONAL AMPLIFIER (OP-AMP) CHARACTERISTICS Unit –7 : OPERATIONAL AMPLIFIER (OP-AMP) AS AN INTERTING

& NON- INVERTING AMPLIFIER

Unit -8 : WEIN BRIDGE OSCILLATOR

Unit –9 : TRIANGULAR WAVE GENERATOR

Unit -10 : SCIMITT TRIGGER USING IC 741 (OP AMP) Unit -11 : ASTABLE MULTIVIBRATOR USING IC 555 Unit -12 : MONOSTABLE MULTIVIBRATOR WITH IC 555

Unit -13: VERIFICATION OF BOOLEAN AND DEMORGAN THEOREMS

Unit –14: HALF ADDER / HALF SUBSTRACTOR

Unit –15 : FULL – ADDER

Unit –16: VERIFICATION OF FLIP-FLOPS

Unit -17: IMPLEMENTATION OF RING COUNTER AND HOHNSON COUNTER

Unit -18: COUNTERS (PART-A) Unit -19: DECADE COUNTER

Unit -20 : DIGITAL TO ANALOG CONVERSION

Unit -21: CRYSTAL OSCILLATOR

Unit -22: HISTORY OF THE 'C' PROGRAMMING LANGUAGE

Unit -23: EVALUATION OF FUNCTIONS

Unit -24 : EVALUATION OF DETRIMENT OF MATRIX Unit -25 : SOLUTION OF NON-LINEAR EQUATIONS

Unit -26: NUMERICAL INTEGRATION

Unit –27: SOLUTIONS FOR DIFFERENTIAL EQUATIONS Unit –28: SOLUTIONS TO SYSTEM OF LINEAR EQUATIONS

Note - Student has to perform at list 15 experiment in the year. Experiments may be changed as per the availability in the study center but the experiment must be of master level.