**PH 481: Electronics Laboratory-I (0-0-6:3)**

1. TostudyCEamplifier
2. ToStudyaRCcoupled amplifier(twostageamplifier)
3. Op-AmpArithmeticOperations
   1. adder,
   2. subtractor
   3. integrator
   4. differentiator
4. Op-Ampsquare,triangleandsawtoothgeneratorusingWienBridgeOscillator
5. TostudysignalconditioningcircuitsusingOp-Amp
   1. currenttovoltageconverter
   2. voltagetocurrentconverter
   3. voltagetofrequencyconverter
6. Tostudymonostable/astablegenerators usingIC555timer
7. TostudyJK/RS/DFlipflop
8. TostudythecharacteristicsofUJTand calculatethe relaxationtime.
9. TostudyAD andDAcircuits
10. Tostudyandconstruct theK-mapofthe givenBoolenexpression
11. To realize and study the Shift Register. Serial in Serial out/Serial in Parallelout/Parallelin Parallel out/Parallel inSerial out.

**References**

1. P. B. Zbar and A. P. Malvino, “Basic Electronics: a text-lab manual”, 7th edition, Tata McGraw Hill, 2001.
2. D. P. Leach, “Experiments in Digital Principles”, 3rd edition, McGraw Hill, 1986.