## **Department of Physics MSc Physics**

PHP 406: PHYSICS PRACTICALS II (Electronics)

## **Course outcome**

CO1 The student will know to construct clipping and clamping circuits, differentiator & integrator circuits, logic gates.

CO2 Will be able to study the UJT characteristics and relaxation oscillator.

CO2 The student will be exposed to wide applications of Opamps in electronics.

CO3 Able to construct MOSFET common source amplifier.

CO4 The student will know to construct BJT differential amplifier, Voltage regulator (with series pass transistor) / 3 pin regulator, Wein bridge oscillator.

- 1 Clipping and clamping circuits
- 2 Differentiator & integrator circuits
- 3 Logic gates.
- 4 UJT characteristics relaxation oscillator.
- 5 Opamp circuits voltage to current converter, current to voltage converter, active limiter and active clamper.
- 6 Active filters high pass, low pass, band pass and band stop
- 7 MOSFET common source amplifier.
- 8 BJT differential amplifier.
- 9 Voltage regulator (with series pass transistor) / 3 pin regulator.
- 10 Wein bridge oscillator.
  - \* Additional experiments may be included.