

  
**MANGALORE UNIVERSITY**  
**MSc Medical Physics**

**Semester – I: Practical Electronics**

**MPP 407: Medical Physics Practical-I (4 hr in a week)**

**Objective:**

To impart the practical knowledge of designing and constructing the electronic circuits useful in understanding characteristics of voltage, current, and power multipliers and regulators and to familiarise with amplifiers, oscillators and multi-vibrators.

**Outcomes:**

Students will be able to construct electronic circuits for testing various hypothesis and measurements such as:

- Voltage multiplier and characterise regulated power pack.
- Construct and characterise transistor based DC Voltage regulator.
- Construct and verify the operation of feedback amplifier.
- Construction of oscillator and free running multi-vibrator circuits.

**List of experiments:**

1. Construction of a voltage multiplier
2. Characteristics of a regulated power pack
3. DC voltage regulator using transistors
4. Feedback amplifier
5. Construction of an oscillator
6. Free running multi-vibrator

**\* Additional experiments may be included.**