



# **CEE 2023**

# LINEAR IC TRAINER

#### The Instrument consists of :-

- 1. DC Regulated Power Supply of : 0 to 5V/100mA (Two Nos.) + 12V/ 250mA + 5V/250mA12V/250mAAC
- 2. IC 741, IC 723, & IC 555 is mounted on front panel with there
- Pin no. & socket for connection 3. Various Resistance, Capacitor, Diode, Zener Diode, LED, Potentiometer
- are fitted on inside of Panel with sockets.
- 4. Required circuit Diagram & Patch cords are provided with instruments.

### The 'CROWN' made Linear IC Trainer to study the following:-

- 1. IC 723 as Variable Voltage Regulator
- 2. Measurement of input bias current of an op-amp.
- 3. Measurement of output off-set voltage of an op-amp.
- 4. To eliminate output off-set of an op-amp.
- 5. Measurement of slew rate of an op-amp.
- 6. Measurement of closed loop gain.
- 7. Op-amp as V-I converter.
- 8. Op-amp as I-V Converter.
- 9. Op-amp as current amplifier.
- 10. Clipper Circuit Using op- amp.
- 11. Clamper Circuit Using op-amp.
- 12. Op-amp as Schmitt Trigger.
- 13. Op-amp as Inverting and non Inverting amp.
- 14. Op-amp as Voltage Buffer.
- 15. Op-amp as Logarithmic Amplifier.
- 16. Op-amp as VCCS.
- 17. Op-amp as Wein Bridge Oscillator.
- 18. Op-amp as Twin –T Oscillator.
- 19. Op-amp as Square Wave Generator.
- 20. Op-amp as Adder and Subtractor.
- 21. Op-amp as Integrator and Differentiator.
- 22. L.P.F and H.P.F Using op-amp.
- 23. Band Pass and Reject Filter Using op-amp.
- 24. Limiter Using op-amp.
- 25. Op-amp as comparator.
- 26. 555 as Astable Multi vibrator.
- 27. 555 as Monosatable Multi vibrator.
- 28. 555 as Bistable Multi vibrator.
- 29. 555 as a Square Wave Generator (2KHz-13KHz).
- 30. 555 as a Triangular Wave Generator.
- 31. 555 as V-F Convertor.

### **OPTIONAL ACC.**

- \* DC-20MHz Dual Trace Oscilloscope.
- Function Generator 1Hz to 1MHz.