



VIMAL JYOTHI ENGINEERING COLLEGE CHEMPERI KANNUR.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ECL 331 ANALOG INTEGRATED CIRCUITS AND SIMULATION LAB

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No.

LIST OF EXPERIMENTS

1. Familiarization of Operational amplifiers - Inverting and Non inverting amplifiers, frequency response, Adder, Integrator, Comparators.
 2. Measurement of Op-Amp parameters.
 3. Difference Amplifier and Instrumentation amplifier.
 4. Schmitt trigger circuit using Op-Amps.
 5. Astable and Monostable multivibrator using Op-Amps.
 6. Waveform generators using Op-Amps - Triangular and saw tooth
 7. Wien bridge oscillator using Op-Amp - without & with amplitude stabilization.
 8. RC Phase shift Oscillator.
 9. Active second order filters using Op-Amp (LPF, HPF, BPF and BSF).
 10. Notch filters to eliminate the 50Hz power line frequency.
 11. Precision rectifiers using Op-Amp.
 12. Astable and Monostable multivibrator using Timer IC NE555
 13. DC power supply using IC 723: Low voltage and high voltage configurations, Short circuit and Fold-back protection.
 14. A/D converters- counter ramp and flash type.
 15. D/A Converters - R-2R ladder circuit
- II. Simulation experiments [The experiments shall be conducted using SPICE]
1. Simulation of any three circuits from Experiments 3, 5, 6, 7, 8, 9, 10 and 11 C of section I
 2. Simulation of Experiments 3 or 4 from section II