

Elective course (Disciplinary)

EPH- 601: LINEAR IC's APPLICATIONS

UNIT – I

Signal processing circuits: Active Filters - First/second order low pass, high pass Butterworth filter, higher order filter, band pass filter (wide/narrow), Bandreject filter (Wide/narrow), All pass filter. Electronic Analog computation using OpAmps. Simulation of transfer function, squareroot, as Rectifier, RMS and phase shift detectors.

UNIT- II

Special Purpose Amplifiers: Opamps using FET input stages, tone controls and graphic equalizers, Isolation Amplifiers, Video Amplifiers LM 733 and RCA 3040, Wide band operational amplifiers. Norton's OpAmp-LM 3900, Norton OpAmp in inverting and Non inverting configuration, FET input OpAmp.

References:

- (1) Gayakwad, OpAmp. and Linear Integrated circuits, PHI. (3rd Ed.)
- (2) K.R.Botkar, Integrated circuits, Khanna Prakashan, (8th Ed).
- (3) Coughlin and Driscoll, Operational Amplifiers and Linear integrated circuits, PHI