



STANLEY
COLLEGE OF ENGINEERING & TECHNOLOGY FOR WOMEN
(Approved by AICTE , New Delhi | Affiliated to Osmania University ,Hyderabad)
Address : Chapel Road, Abids ,Hyderabad

EC 271

ELECTRONIC ENGINEERING - II

UNIT-I

Feedback amplifiers: Concept of Feedback, Feedback amplifier configurations, Circuits, Advantages of negative feedback, Analysis of simple feedback amplifiers using BJTs and FETs.

UNIT-II

Oscillators: Barkhausen criterion; RC oscillators; Weinbridge, phase shift, LC, Hartley and colpitts oscillators; Crystal controlled oscillators (Analysis of oscillators using BJTs only), stability of oscillators.

UNIT-III

D.C. Amplifiers: Problems of dc amplifiers, drift compensation techniques, differential amplifiers; importance of CMRR, high CMRR, Differential Amplifier.

UNIT-IV

power Amplifiers: Classification of power amplifiers, analysis of class A and B power amplifiers; Distortion in amplifiers, pushpull amplifiers, complementary symmetry.

UNIT-V

Wave shaping circuits: RC low pass and high pass circuits; response to step, pulse, Ramp and Square wave inputs; differentiating and integrating circuits using diode; clipping circuits for single level and two levels; clamping circuits.

Suggested Reading:

1. Jacob Millman, Christos C. Halkias and Chetan Parikh, *Integrated Electronics*, TMH, 2/e., 2009.

2. Jacob Millman, Christos C. Halkias and Satyabrata Jit, *Electronics Devices and Circuits*, McGraw Hill, 3/e., 2010.

3. Jacob Millman & Herbert Taub, *Pulse, Digital and Switching waveforms*, TMH, 3/e., 2011.

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