

ANURAG ENGINEERING COLLEGE

(An Autonomous Institution)

III Year B.Tech. (ECE), II Semester

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(EC606PC) **DIGITAL SIGNAL PROCESSING LAB**

Note:

- Minimum 12 experiments are to be conducted.
- The programs shall be implemented in software(Using MATLAB/Lab view/C programming/OCTAVE Equivalent) and hardware (Using TI / Analog devices/Motorola/Equivalent DSP processor)

List of Experiments:

1. Generation of Sinusoidal waveform/ signal based on recursive difference equations.
2. Impulse response of first order and second order systems.
3. To find DFT/IDFT of given DT signal.
4. To verify Linear convolution of given sequence.
5. To verify Circular convolution of given sequence.
6. To find frequency response of given system given in (Transfer Function/Differential equation form).
7. Implementation of FFT of given sequence.
8. Determination of power spectrum of a given signal(s).
9. Implementation of LP FIR filters for a given sequence.
10. Implementation of HP FIR filters for a given sequence.
11. Implementation of LP IIR filters for a given sequence.
12. Implementation of HP IIR filters for a given sequence.
13. Generation of Sinusoidal signal through filtering.
14. Generation of DTMF signals.
15. Implementation of Interpolation and decimation.