	L	T	P	C
III Year II Semester				
Code: 17EC612	**3**	**1**	**0**	**3**

DIGITAL SIGNAL PROCESSING LAB

List of experiments/Programs:

The student has to perform the following experiments using MATLAB. (Any 10)

1. Generation of discrete time signals.
2. To perform different signal operations (Ex. Sum, difference, shifting, scaling).
3. To find the addition of two sinusoidal signals
4. To find the linear convolution of two discrete time signals.
5. To find the circular convolution of two discrete time signals.
6. To verify discrete Fourier transform (DFT) and Inverse discrete Fourier transform (IDFT).
7. Find the power density spectrum of a given sequence and plot the spectrum.
8. Find the frequency response of IIR low pass Butterworth filters.
9. Find the frequency response of IIR high pass Butterworth filters
10. Find the frequency response of IIR low pass Chebyshev filters.
11. Find the frequency response of IIR high pass Chebyshev filters.
12. Find the frequency response of FIR low pass filters using Rectangular window.
13. Find the frequency response of FIR low pass filters using Triangular window.

Implement the following using TMS processors: (Exp. 14,15 & 16 are compoulsory)

14. To study the architecture of DSP chips – TMS 32C 6X instructions
15. Find the linear convolution for two discrete time signals.
16. Find the DFT of a given sequence.