SEMESTER V

EC1507 DIGITAL SIGNAL PROCESSING LABORATORY

LIST OF EXPERIMENTS

LIST OF EXPERIMENTS: MATLAB / EQUIVALENT SOFTWARE PACKAGE

1. Generation of elementary Discrete-Time sequences
2. Linear and Circular convolutions
3. Auto-correlation and Cross-correlation
4. Frequency Analysis using DFT
5. Design of FIR filters (LPF/HPF/BPF/BSF) and demonstrate the filtering operations
6. Design of Butterworth and Chebyshev IIR filters (LPF/HPF/BPF/BSF) and demonstrate the filtering operations

DSP PROCESSOR BASED IMPLEMENTATION

1. Linear convolution
2. Circular convolution
3. Design and demonstration of FIR Filter for Low-pass, High-pass, Band-pass and Band-stop filtering
4. Design and demonstration of Butterworth and Chebyshev IIR Filters for Low-pass, High -pass, Band-pass and Band-stop filtering
5. Implement an Up-sampling and Down-sampling operation in DSP Processor

LIST OF EQUIPMENT

Sl. No.	Description of Equipment
1.	PCs with Fixed / Floating point DSP Processors (Kit / Add-on Cards)
2.	MATLAB with Simulink and Signal Processing Tool Box or Equivalent Software in desktop systems
3.	Signal Generators (1MHz)
4.	CRO/ DSO (20MHz)