JIS College of Engineering

Department of Electronics & Communication Engineering

Course Name Course Name: Digital Signal Processing Lab

Course Code: EC495 Contacts: 0:0:3 Credits: 1.5

List of Experiments:

Convolution of two sequences using graphical methods and using commands- verification of the properties of convolution.

Systems (Causal and Noncausal, Time-Invariant Time-variant etc.)verification using MATLAB.

Z-transform of various sequences–verification of the properties of Z-transform.

DFT using twiddle factors.

DFTs /IDFTs using matrix multiplication and also using commands.

Circular convolution of two sequences using graphical methods and using commands, differentiation between linear and circular convolution.

Verificationsofthedifferentalgorithmsassociatedwithfilteringoflongdata sequences and overlap –add and Overlap-save methods.

Butterworth Filter Design With a different set of parameters.

FIR filter design using rectangular, Hamming and Blackman windows.

Frequencyresponsesofanti-imagingandanti-aliasingfilters.

Develop and Implement DSP algorithms in software using a computer language such as C with TMS320C6713 floating point Processor, TMS5416 kit and ASM along with C.