

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: M.Sc (Electronics & Communication)**  
**Semester: III**  
**Syllabus with Effect from: June - 2012**

<b>Paper Code: PS03CELC04</b>	<b>Total Credit: 4</b>
<b>Title Of Paper: Practical - I</b>	

	<b>Description in detail</b>	<b>Weightage (%)</b>
1	Write a MATLAB/SCILAB program to generate the following sequence Unit Sample Sequence Unit Step Sequence Ramp Sequence Complex exponential sequence Sine, Cosine, Square wave at 5 Hz	
2	Write a MATLAB/SCILAB program to plot Impulse response computation using stem function	
3	Write a MATLAB/SCILAB program for Signal smoothing by moving-average Filter	
4	Write a MATLAB/SCILAB program for Computation of cross-correlation of a sequence	
5	Write a MATLAB/SCILAB program for Computation of Autocorrelation of a sequence	
6	Write a MATLAB/SCILAB program for Linear convolution of a two sequence	
7	Write a MATLAB/SCILAB program for Partial fraction expansion to Rational Z-transform	
8	Write a MATLAB/SCILAB program for Determination of the rational Z-transform from its poles and zeros and vice versa	
9	Write a MATLAB/SCILAB program for Determination of the factored form of a Rational Z-transform	
10	Write a MATLAB/SCILAB program for DFT (Discrete Fourier Transform) computation	
11	Write a MATLAB/SCILAB program for IDFT (Inverse Discrete Fourier Transform) computation	
12	Write a MATLAB/SCILAB program for Computation of Linear convolution with DFT	
13	Write a MATLAB/SCILAB program for Butterworth low pass filter.	
14	Write a MATLAB/SCILAB program for Chebyshev type 1 Low pass filter	
15	Write a MATLAB/SCILAB program for IIR Butterworth Band pass Filter	
16	Write a MATLAB/SCILAB program for Chebyshev type 1 IIR High pass Filter Design	
17	Write a MATLAB/SCILAB program for Generation of rectangular, hamming, hanning, blackman and kaiser window	

