YMCA University of Science & Technology, Faridabad

Term: B.Tech EIC III Semester

Course Name: Signals and Systems (EI-204C) Faculty

Unit		Topic	No. of lectures required
	1.1	Continuous Time and Discrete Time signals	2
	1.2	Exponential and Sinusoidal Signals	1
	1.3	Unit Impulse and Unit Step Functions	1
	1.4	Continuous and Discrete Time Systems	1
1	1.5	Basic System Properties	2
	2.1	Discrete Time LTI Systems	2
	2.2	Continuous Time LTI Systems	1
	2.3	Properties of LTI Systems	2
2	2.4	Causal LTI Systems Described by Difference equations	2
	3.1	Response of LTI systems to Complex Exponentials	1
	3.2	Fourier series Representation of CT periodic Signals	2
	3.3	Properties of CT Fourier Series,	2
	3.4	Fourier Series representation of DT periodic Signals	2
	3.5	Properties of DFS	2
	3.6	Fourier series and LTI Systems	1
	3.7	Filtering	1
3	3.8	Examples of CT filters, Examples of DT filters	1
	4.1	Representation of a periodic Signals by continuous FT	1
	4.2	FT of periodic signals, convolution and multiplication property of continuous FT	2
	4.3	Systems characterized by Linear Constant Coefficient Differential Equations	1
	4.4	Magnitude and phase representation of FT	1
	4.5	Magnitude and phase response of LTI systems	1
4	4.6	Time domain and Frequency domain aspects of ideal and non ideal filters	1
	5.1	Need of Laplace transform, ROC	1
	5.2	Properties	2
	5.3	Initial and final value theorem	1
5	5.4	Parallel and cascade structure	1
	6.1	Properties of DTFT	2
	6.2	Convolution property, multiplication property, Duality property	1
	6.3	Systems characterized by Linear Constant Coefficient Difference Equations	1
6	6.4	Properties of DFT	2