

**Course wise Teaching Plan for Session : Summer 2019****Course : DIGITAL SIGNAL PROCESSING****Faculty : ankur.bobade@raisoni.net - ANKUR MOHAN BOBADE**

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Syllabus Discussion, Discussion on course objective & course outcome	03/12/2018	BECL307	B
1	1	Problems on Sampling Theorem and identification of system (T1, T2 ,T3 Batch)	05/12/2018	BECL307	B
1	2	Introduction to discrete time signals and systems	05/12/2018	BECL307	B
1	3	Properties of discrete time systems	07/12/2018	BECL307	B
1	4	Linear convolution using graphical & Tabulation method	10/12/2018	BECL307	B
1	2	Problems on identification of system (T1, T2 ,T3 Batch)	12/12/2018	BECL307	B
1	5	Cross Correlation, Autocorrelation of discrete signals	12/12/2018	BECL307	B
1	6	Sampling theorem & sampling process	14/12/2018	BECL307	B
1	7	Basic elements of DSP and its requirements,	17/12/2018	BECL307	B
1	2	Discussion on GATE Exam Questions on convolution, Autocorrelation (T1, T2 ,T3 Batch)	19/12/2018	BECL307	B
1	8	Advantages of Digital over Analog signal processing	19/12/2018	BECL307	B
2	9	Frequency domain representation of discrete time signals and systems	21/12/2018	BECL307	B
2	3	Problems on properties of DFT (T1, T2 ,T3 Batch)	02/01/2019	BECL307	B
2	10	Fourier transform of discrete time signals	02/01/2019	BECL307	B
2	11	Properties of discrete time fourier transform	04/01/2019	BECL307	B
2	12	The Z–transform, Definition, properties of ROC for the Z–transform	07/01/2019	BECL307	B
2	4	Discussion on GATE Exam Questions on Z-Transform (T1, T2 ,T3 Batch)	09/01/2019	BECL307	B
2	13	Properties of Z–transform, Inverse Z–transform using contour integration	09/01/2019	BECL307	B
3	14	Transform analysis of LTI system & structure for discrete time system	14/01/2019	BECL307	B
3	5	Problems on Filter realization (T1, T2 Batch)	16/01/2019	BECL307	B



# G H RAISONI COLLEGE OF ENGINEERING AND MANAGEMENT WAGHOLI PUNE

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3	15	Frequency response of LTI system	16/01/2019	BECL307	B
3	16	Relationship between magnitude & phase response	18/01/2019	BECL307	B
3	17	Block diagram representation & signal flow graph representation of IIR systems	21/01/2019	BECL307	B
3	6	Discussion on GATE Exam Questions on FIR & IIR Filters (T1, T2 ,T3 Batch)	23/01/2019	BECL307	B
3	18	Block diagram representation & signal flow graph representation of FIR systems	23/01/2019	BECL307	B
3	19	Linear constant coefficient difference equations, Basic structures for IIR systems	25/01/2019	BECL307	B
3	20	realization using direct form, cascade form and parallel form	28/01/2019	BECL307	B
4	7	Problems on Filter Design (T1, T2 ,T3 Batch)	30/01/2019	BECL307	B
3	21	realization using direct form, cascade form and parallel form	30/01/2019	BECL307	B
3	22	basic network structures for FIR systems, lattice structures.	01/02/2019	BECL307	B
3	23	Design of discrete time IIR filters from continuous time filters	04/02/2019	BECL307	B
4	8	Gate Exam Question on Windowing method (T1, T2 ,T3 Batch)	06/02/2019	BECL307	B
4	24	Frequency transformation of low pass IIR filters	06/02/2019	BECL307	B
4	25	Characteristics of Butterworth filters	08/02/2019	BECL307	B
4	26	Characteristics of Chebyshev filters	11/02/2019	BECL307	B
5	9	Numericals on DFT & IDFT (T1, T2 ,T3 Batch)	13/02/2019	BECL307	B
4	27	Design of FIR filters by windowing	13/02/2019	BECL307	B
4	28	FIR filter design by Kaiser and Hamming window method.	15/02/2019	BECL307	B
5	29	Discrete Fourier series, properties of discrete Fourier series	22/02/2019	BECL307	B
5	30	Discrete Fourier transform, properties of DFT,	25/02/2019	BECL307	B



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5	10	Numericals on FFT (T1, T2 ,T3 Batch)	27/02/2019	BECL307	B
5	31	Inverse DFT	27/02/2019	BECL307	B
5	32	circular convolution using DFT-IDFT method	01/03/2019	BECL307	B
6	11	Discussion on GATE Exam Questions on TMS320 & its application (T1, T2 ,T3 Batch)	06/03/2019	BECL307	B
5	33	Fast Fourier transform, Decimation in time FFT algorithm, decimation in frequency FFT algorithm	06/03/2019	BECL307	B
5	34	FFT of long sequences using overlap add and overlap save method	08/03/2019	BECL307	B
6	35	Intoaducetion general DSP processor TMS320C54XXseries,	15/03/2019	BECL307	B
6	36	Case study of Real Time DSP applications to Speech Signal Processing	18/03/2019	BECL307	B
6	12	Discussion on Real time applications od DSP (T1, T2 ,T3 Batch)	20/03/2019	BECL307	B
6	37	Case study of Real Time DSP applications to Biomedical Signal Processing.	20/03/2019	BECL307	B
6	38	Revision & Douts clearing session	22/03/2019	BECL307	B
6	39	Revision & Douts clearing session	29/03/2019	BECL307	B