CT303: Digital Communications

Section B, Autumn, 2022-2023, DAIICT

Lecture-wise breakup of the content, and problems to be solved.

S. No.	Lecture Date	Focus of the lecture	Where to read from?	Problems to be solved
1.	02 August, 2022	Introduction to course; 4 categories of signal; Analog communication	[1]: Section 1.1; [2]: Sections 1.2.2, 1.2.3	None
2.	04 August, 2022	Analog vs Digital Communication (AvD-C)	[1]: Section 1.1.2; [3]: Chapter 1, parts 5,6,7,8; [4]: Section 1-2 for benefits of DC in brief.	None
3.	05 August, 2022	Closing comments for AvD-C; Discussion on Pulse modulation	[3]: Section 3.1; [1]: Section 1.1.2, 1.1.3, 1.1.4	None
4.	12 August, 2022	Sampling theorem	[3]: Sections 3.1, 3.2	[3]: Problems 3.2, 3.3
5.	19 August, 2022	Sampling theorem (contd.)	[3]: Sections 3.1, 3.2	[4]: Problems 2-48, 2-54
6.	23 August, 2022	Revision of lectures 4 & 5 due to low attendance in past two lectures.	[3]: Sections 3.1, 3.2	Not applicable

References:

[1] Introduction to Communication systems, U. Madhow.
[2] Digital Signal Processing: principles, algorithms and applications, 4th edition, J. G. Proakis and D. G. Manolakis.
[3] Communication Systems, S. Haykin, 4th edition.
[4] Digital and Analog Communication systems, 6th edition, Leon W. Couch II.
[5] Modern Digital and Analog Communication Systems, B. P. Lathi and Z. Ding, International 4th edition.
[6] Digital Communications: Fundamentals and Applications, 2nd edition, B. Sklar and P. B. Ray.
[7] Communication Systems Engineering, 2nd edition, J. G. Proakis and M. Salehi, LPE, Pearson Education