Indian Institute of Science

Mathematical Methods and Techniques in Signal Processing

Instructor: Shayan Srinivasa Garani
Home Work #2, Spring 2022

Late submission policy: Points scored = Correct points scored $\times e^{-d}$, d = # days late

Assigned date: Mar. 1$^{\text{st}}$, 2022 　　　　　　　　　　　　　**Due date:** Mar. 15$^{\text{th}}$, 2022, 11:59 pm.

Solve problems 4.11 (along with the plots for $Y(e^{j\omega})$ and $S(e^{j\omega})$, obtain the expressions after each stage in the signal flow diagram, be it filtering or downsampling or upsampling), 4.15 (Work out the problem with parameters $L = 3$ and $M = 5$), 4.25, 4.27 and 4.30 from P. P. Vaidyanathan's book. (100 pts.).