

Indian Institute of Space Science and Technology
AV312 - Digital Communication
Department of Avionics

Assignment 1

Question 1: Suppose $g(t)$ is a CT real valued signal. Let $\hat{g}(t)$ be the Hilbert transformed version of $g(t)$. Show that $g(t)$ and $\hat{g}(t)$ are orthogonal using the “convolution trick” discussed in class.

Question 2: Do questions 2.1, 2.3, 2.9, 2.11. Please try to do these questions on your own without referring to any solution manual.