**-DAILY ASSESSMENT FORMAT**

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| **Date:** | **26-05-2020** | **Name:** | **Varun G Shetty** |
| **Course:** | **Digital signal processing** | **USN:** | **4AL17EC093** |
| **Topic:** | **Fourier Series & Gibbs Phenomena using Python**  **Fourier Transform and derivatives**  **convolution,**  **laplace transform and z- transform** | **Semester & Section:** | **6th & ‘B’** |
| **GitHub Repository:** | **Varunshetty4** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session**  **1.**    **2.**    **3.**  **4.** |
| **Report – Report can be typed or hand written for up to two pages.**  **Today I have learnt:**   * Fourier Series & Gibbs Phenomena using Python * Fourier Transform and its derivative * Fourier Transform and Convolution * Intuition of Fourier Transform and Laplace Transform * Laplace Transform of First order * Implementation of Laplace Transform using Matlab * Applications of Z-Transform * Find the Z-Transform of sequence using Matlab   Given the Fourier transform of a general function, find the Fourier transform of its derivative. Use this result to find the Fourier transform of a window function out of the Fourier transform of an antisymmetric pair of delta functions. (t)eiωtdt. (t)] = −iωF(ω).  Each of these sinusoidal terms has a magnitude (scale factor) and a phase (shift). – Note that in a computer, we can represent a function as an array of numbers giving the values of that function at equally spaced points fourier and Laplace transforms are very much related to each other, and both of them can help you solve differential equations, but the intuitive difference is that: The Fourier Transform is more useful for understanding the steady state response of a system.  Z transform is used to convert discrete time domain signal into discrete frequency domain signal. It has wide range of applications in mathematics and digital signal processing. It is mainly used to analyze and process digital data. |