**DAILY ASSESSMENT FORMAT**

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| **Date:** | **25-05-2020** | **Name:** | **Krishna Swetha** |
| **Course:** | **Digital Signal Processing** | **USN:** | **4AL16EC032** |
| **Topic:** | **Fourier Series** | **Semester & Section:** | **6th & B** |
| **Github Repository:** | **Krishna-Swetha** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session**   1. **Introduction.** 2. **Fourier Series part-1,2.** 3. **Inner product in Hilbert Transform.** 4. **Complex Fourier Series.** 5. **Fourier Series using Mat Lab.** 6. **Fourier Series using Python.** 7. **Fourier Series and Gibbs phenomena.** |
| Introduction:  1. Fourier Series and Wavelets. 2. Coordinate Transform-used for Image Compression. 3. Hilbert Transform. 4. Fast Fourier Transform(FFT).  Discrete Fourier Transform:  * It converts a finite sequence of equally spaced samples of a function into a same length sequence of equally -spaced samples of DTFT.   Analyzing the Functions. Fourier Series:  * A Fourier series is a way of representing a periodic function as a (possibly infinite) sum of sine and cosine functions. It is analogous to a Taylor series, which represents functions as possibly infinite sums of monomial terms. A sawtooth wave represented by a successively larger sum of trigonometric terms.    Inner Product in Hilbert Space:  * A Hilbert space H is a real or complex inner product space that is also a complete metric space with respect to the distance function induced by the inner product. A real inner product space is defined in the same way, except that H is a real vector space and the inner product takes real values.   Sampling. Complex Fourier Series:  * The complex Fourier series is presented first with period 2π, then with general period. * Using Mat Lab. |

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| **Course:** | **Python-Boot**  **camp for data analytics and ML** | **USN:** | **4AL16EC032** | |
| **Topic:** | **Sets** | **Semester & Section:** | **6th &B** | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session** | | | |
| **1.SETs.** Sets  * **Set properties:** unordered, iterable, mutable, can contain multiple data types * Made of unique elements (strings, numbers, or tuples) * Like dictionaries, but with keys only (no values) * **Examine a set.** * **Set operations.** * **Modify a set (does not return the set).** * **Get a sorted list of unique elements from a list.** | | | |