**DAILY ASSESSMENT FORMAT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date:** | **26/05/2020** | **Name:** | **DHAMINI C L** |
| **Course:** | **DIGITAL SIGNAL PROCESSING** | **USN:** | **4AL17EC025** |
| **Topic:** | **Fourier Series & Gibbs**  **Phenomena using Python**  **• Fourier Transform**  **• Fourier Transform**  **Derivatives**  **• 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** | **Semester & Section:** | **6TH & A** |
| **Github Repository:** | **DHAMINI-CL-Course** |  |  |

|  |
| --- |
| **FORENOON SESSION DETAILS** |
|  |
| **Report – Report can be typed or hand written for up to two pages.**  **Fourier Series & Gibbs Phenomena using Python:**  **Fourier Transform & Fourier Transform Derivatives:**    **• Digital Signal Processing/Discrete Fourier Transform. As the name implies, the**  **Discrete Fourier Transform (DFT) is purely discrete: discrete-time data sets are converted**  **into a discrete-frequency representation. This is in contrast to the DTFT that uses discrete**  **time, but converts to continuous frequency.**  **Fourier Transform and Convolution:**  **• Why study Fourier transforms and convolution? 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.**    **Laplace Transform of First order:**  **• One familiar input to a first order system is the step change or step input. A step change**  **from 0 to 1 is equivalent to a function that is equal to 0 for time < 0, and is equal to 1 for**  **time 3 0. The Laplace transform of such a function is 1/s.**  **Applications of Z-Transform**  **• Sampled systems**  **• Inputs and outputs are related by difference equations and Z-transform techniques are**  **used to solve those difference equations.**  **• VOICE TRANSMISSION: To band-limit the signal and filter noise from the signal.**  **• Calculation of a signal to control a system.** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date:26/5/2020** |  | **Name: DHAMINI C L** |  | |
| **Course:PYTHON** |  | **USN:4AL17EC025** |  | |
| **Topic: dictionary application** |  | **Semester & Section:6TH A SEC** |  | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session** | | | |
| **Report – Report can be typed or hand written for up to two pages.**  .  **Dictionary** in Python is an unordered collection of data values, used to store data values like a map, which unlike other Data Types that hold only single value as an element, Dictionary holds key:value pair. Key value is provided in the dictionary to make it more optimized. Each key-value pair in a Dictionary is separated by a colon :, whereas each key is separated by a ‘comma’.  A Dictionary in Python works similar to the Dictionary in a real world. Keys of a Dictionary must be unique and of immutable data type such as Strings, Integers, and tuples, but the key-values can be repeated and be of any type.   * **json:**It comes built-in with python, so there is no need to install it externally. To know more about JSON * **difflib:**This module provides classes and functions for comparing sequences. It also comes built-in with python so there is no need to install it externally. | | | |