**DAILY ASSESSMENT FORMAT**

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| **Date:** | **5/27/20** | | **Name:** | **Sathya br** | | |
| **Course:** | **DSP** | | **USN:** | **4al16ec065** | | |
| **Topic:** | **Fourier Series and Gibbs Phenomenon using Python, Laplace transform using Matlab,Z Transform Using Matlab.** | | **Semester & Section:** | **6th semester**  **B section** | | |
| **Github Repository:** | **sathyabr** | | **E-mail:** | **sathyabr1998@gmail.com** | | |
| **FORENOON SESSION DETAILS** | | | | | |
| **Image of session** | | | | | |
| **Report – Report can be typed or hand written for up to two pages.**  **Fourier Series and Fourier Transform Fourier Series**  **Fourier Transform**  ∞ *f*(*x*)=1*a*0 +∑(*akcos*2*kt*+*bksin*2*kt*)  −∞  ∞  *X*(*F*) = ∫ *x*(*t*)*e*−*j*2*Ftdt* −∞  2  **Fourier Series and Gibbs Phenomana Using Python import numpy as np import matplotlib.pyplot as plt plt.rcParams['figure.figsize']=[8,8] plt.rcParams.update({'font.size':18})**  **dx=0.01 L=2\*np.pi x=np.arange(0,L+dx,dx) n=len(x) nquart=int(np.floor(n/4)) f=np.zeros\_like(x) f[nquart:3\*nquart]=1 A0=np.sum(f\*np.ones\_like(x))\*dx\*2/L fFs=A0/2\*np.ones\_like(f) for k in range(1,101):**  **Ak=np.sum(f\*np.cos(2\*np.pi\*k\*x/L))\*dx\*2/L Bk=np.sum(f\*np.sin(2\*np.pi\*k\*x/L))\*dx\*2/L fFs=fFs+Ak\*np.cos(2\*k\*np.pi\*x/L)+Bk\*np.sin(2\*k\*np.pi\*x/L)**  **plt.plot(x,f,color='k',LineWidth=2) plt.plot(x,fFs,'-',color='r',Linewidth=1.5) plt.show()**  **Laplace Transform [Matlab] clear all; close all; syms L f t; f=(exp(-3\*t)\*sin(2\*t))/t**  **L=laplace(f**​**)**  **Inverse Laplace Transform clear all; close all;**  **syms F,s,x; F=(s+29)/(s^3+4\*s^2+9\*s+36) ilaplace(F,x)**  **Z Transform Using Matlab clear all; close all; syms n,w;**  **a=sin(w\*n) b=ztrans(a) disp(b) (z\*sin(w))/(z^2 -2\*cos(w)\*z+1) pretty(b)** | | | | | |
| **Date:** | **5/27/20** | **Name:** | | | **Sathya br** |
| **Course:** | **Python Core and Advanced** | **USN:** | | | **4al16ec065** |
| **Topic:** | **Sequence Types** | **Semester & Section:** | | | **6th semester**  **B section** |
| **AFTERNOON SESSION DETAILS** | | | | | |
| **Image of session** | | | | | |
| **Report**   * **Introduction** * **Create a string** * **Slicing a string** * **Steps in slicing** * **Strip the spaces** * **Few more string methods** * **Assignment 1: Data Types** * **Create a list** * **Adding and removing list elements** * **Few more list functions** * **Tuple** | | | | | |