**DAILY ASSESSMENT FORMAT**

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| **Date:** | **26/5/2020** | | **Name:** | **Abhishek Vasudev Mahendrakar** | | |
| **Course:** | **TCS ION** | | **USN:** | **4AL17EC003** | | |
| **Topic:** | **Fourier Series and Gibbs Phenomenon using Python, Laplace transform using Matlab,Z Transform Using Matlab.** | | **Semester & Section:** | **6th-‘A’** | | |
| **Github Repository:** | **ECEAbhishekVMahendrakar** | | **E-mail:** | **abhi2244mahendrakar@gmail.com** | | |
| **FORENOON SESSION DETAILS** | | | | | |
| **Image of session**  page1image55003168 | | | | | |
| **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:** | **12/5/2020** | **Name:** | | | **Abhishek Vasudev Mahendrakar** |
| **Course:** | **UDEMY-The Python Mega Course: Build 10 real world applications** | **USN:** | | | **4AL17EC003** |
| **Topic:** | **Personal Website with Python and Flask** | **Semester & Section:** | | | **6th-‘A’** |
| **AFTERNOON SESSION DETAILS** | | | | | |
| **Image of session** | | | | | |
| **Report – Report can be typed or hand written for up to two pages.**  **Report – Report can be typed or hand written for up to two pages.**  **script1.py**  from​ flask ​import​ Flask, render\_template app=Flask(​\_\_name\_\_​)  @app.route​(​'/'​) def​ ​home​():  ​return​ render\_template(​"home.html"​)  @app.route​(​'/about/'​) def​ ​about​():  ​return​ render\_template(​"about.html"​)  if​ ​\_\_name\_\_​==​"\_\_main\_\_"​: app.run(​debug​=​True​)  home.html  {% extends "layout.html" %} {% block content %} <​div​ ​class​=​"home"​>  ​<​h1​>​My homepage​</​h1​>  ​<​p​>​This is a test website​</​p​> </​div​>  {% endblock %}  about.html  {% extends "layout.html" %} {% block content %} <​div​ ​class​=​"about"​>  ​<​h1​>​My about page​</​h1​> ​<​p​>​This is a test website again​</​p​> ​<​p​>​This was added later​</​p​>  </​div​> {% endblock %}  layout.html  <!​DOCTYPE​ ​html​> <​html​>  ​<​head​>  ​<​title​>​Flask App​</​title​>  ​<​link​ ​rel​=​"stylesheet" href​=​"{{url\_for('static',filename='css/main.css')}}"​>  ​</​head​> ​<​body​>  ​<​header​> ​<​div​ ​class​=​"container"​>  ​<​h1​ ​class​=​"logo"​>Persis’ web app​</​h1​> ​<​strong​><​nav​>  ​<​ul​ ​class​=​"menu"​> ​<​li​><​a​ ​href​=​"{{ url\_for('home') }}"​>​Home​</​a​></​li​> ​<​li​><​a​ ​href​=​"{{ url\_for('about') }}"​>​About​</​a​></​li​>  ​</​ul​> ​</​nav​></​strong​>  ​</​div​> ​</​header​> ​<​div​ ​class​=​"container"​>  {%block content%}  {%endblock%}  ​</​div​> ​</​body​>  </​html​> | | | | | |