**DAILY ASSESSMENT FORMAT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date:** | **29-May-2020** | **Name:** | **Vishwesh V Bhat** |
| **Course:** | **Python by Udemy** | **USN:** | **4AL18EC059** |
| **Topic:** | 1. **List Comprehension.** | **Semester & Section:** | **4th SEM and ‘A’ SEC** |
| **Github Repository:** | **Vishwesh-V-Bhat-lockdwn-learnings** |  |  |

|  |
| --- |
| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **Report – Report can be typed or hand written for up to two pages.**   * **In session Quizzes on String formatting and List comprehension.** * **Defined a function that takes a list as parameter containing both numbers and strings and returns the list containing only numbers.** * **Defined a function that takes list of numbers and returns a new list of only those numbers that are greater than 0/ or any other specified value.** * **Defined a function that takes list as parameter containing both numbers and strings, and returns the same list but with 0’s in place of strings.** * **Defined a function that takes lists as parameter that contain decimal values as strings and returns sum of those values.** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date:** | **29-May-2020** | **Name:** | **Vishwesh V Bhat** | |
| **Course:** | **Course on Signals and Systems** | **USN:** | **4al18ec059** | |
| **Topic:** | 1. **Fourier Transform** 2. **Fourier transform derivatives** 3. **Fourier transform & Convolution** | **Semester & Section:** | **4th SEM & ‘A’ SEC** | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session** | | | |
| **Report – Report can be typed or hand written for up to two pages.**   * **The session started off by bringing up the contrast between “Fourier series” and “Fourier Transform”(using hat function as ex.).** * **The Fourier series is applicable to all periodic functions and thus considers that the given function is replicated towards +infinity as well as -infinity.** * **Whereas the Fourier transform considers that the limits of the given function continue/extend till infinities(+ and -).** * **The f(x) equations of Fourier series and Fourier transform were noted.** * **Inverse Fourier Transform was discussed.(recovering f(x) from f(inv(x)) and vice - e - versa.** * **Then the “derivatives of functions” were considered, and we observed that: Fourier transform of the derivative of a function is nothing but i(omega) times the fourier transform of that function =>** F(f(x)) = i(ʊ)F[deriv(f(x))] * **We saw how Partial differential equations can be brought to the form of ordinary differential equation by Fourier transforming in space/time the given PDEs.** * **Then we saw how convolution integrals can be simplified using Fourier transformations.** | | | |
|  | | | |