VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

School of Computer Science and Engineering

Lab exercise-5

Code/Course	**:**	**CSE3020 – Data Visualisation**	**Date**	**:**	**22/02/2021**
Lab Experiments		**Time Series Analysis**	**Slot**	**:**	**L15+L16**

Pre-requisite: Moderately familiar with basic concepts in R, including variables and functions, and with Studio, the integrated development environment for programming in R.

Consider the COVID-19 pandemic situation. Analysis and forecast the pandemic trend by using Covid19 dataset

1. You want to predict the last year monthly, weekly trend based on the RTPCR response, (i.e.) No. of +Ve cases and No. –Ve cases along with admitted and discharged trend.
2. Identify the death rate due to Covid-19

3. Compare the last year and this year trends with respect to 1^{st} , 2^{nd} and 3^{rd} wave also forecast the 4th Wave impact in India

4. Construct the model using the Simple moving average, Exponential Moving Average and ARIMA to forecast the Covid19 Dataset.

5. Show the all above implementation with the visual impact