

Homework 2

Due: October 11, 2022

Note: 1. Work alone. 2. Write your answers into a Jupyter Notebook file and submit the file to the TA.

Total points: 6

1. Using Python, perform the following for the KOSPI index returns during the period 2021:01:02-2021:12:30 (on the basis of daily, closing prices).
 - (a) (2 points) Find a proper ARMA model for the log KOSPI index.
 - (b) (2 points) Test whether the log KOSPI index has a unit root or not using the augmented Dickey-Fuller test.
2. (2 points) Find a proper SARIMA model for the monthly Korean unemployment rate during the period 2010:01-2021:12.