Question 6 Select the file assigned to you on D2L and do the following:

a) Graph the series of historic values.
b) For the historic series of prices compute the ACF and PACF and show a graph.

c) For the historic series of prices fit an ARMA(p,q) model by conveniently selecting the orders p and q. Explain the criterion to select the order.
d) For the historic series of prices estimate the parameters in an ARMA(p,q) model, show results in a table and write the fitted equation with significant parameters.
e) For the assigned series fit a GARCH(1,1) model, with Gaussian and t-student noises, show a table with results and write models with significant parameters (in MATLAB you may use the command garchfit).
f) Graph the conditional variance for the series of log-returns of a GARCH(1,1) model.
g) Compute the standardized residuals (show a graph) and their ACF and PACF.

Write a comment of at least one line for each result.